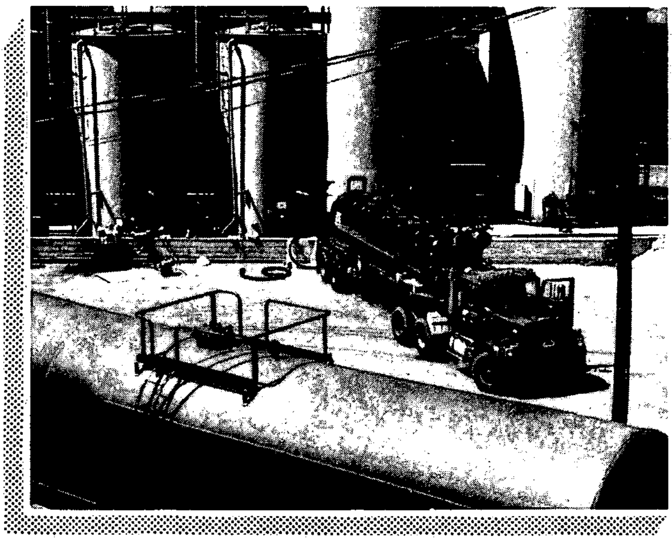
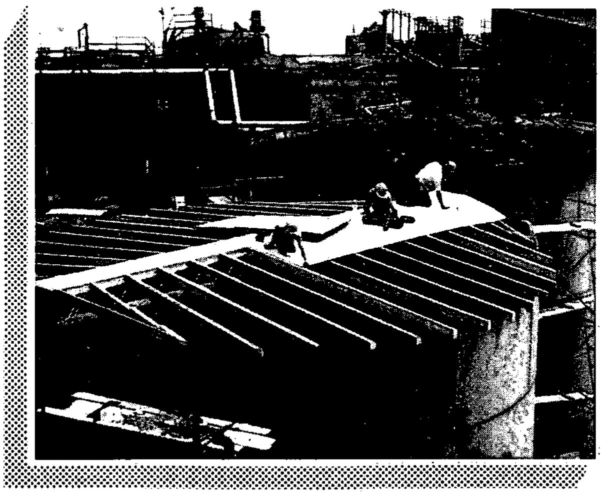
U.S. Environmental Protection Agency Region II
Emergency and Remedial Response Division
Response and Prevention Branch

On-Scene Coordinator's Report
Quanta Resources Immediate Removal Action
Edgewater, Bergen County, New Jersey

OSC: John Witkowski





Roy F. Weston, Inc.
Spill Prevention & Emergency Response Division
In Association with Jacobs Engineering Group Inc., Tetra Tech, Inc. and ICF Incorporated

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Immediate Removal Action
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Site Identification Number: 43

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1.0 HISTORY

1.1. Site Description:

The Quanta Resources site is located on One River Road, Edgewater, Bergen County, New Jersey, (Figure 1). The eastern boundary is the Hudson River, the property being located approximately opposite to West 93rd Street, Manhattan on the other side of the river. The site is an industrial area, bordered on the north by the Celotex Industrial Park, the former Spencer-Kellog industrial site on the south, and River Road, a primary commercial thoroughfare, on the west. The New Jersey Palisades provides a backdrop to the site some 500 yards to the west and is the location for numerous residential units, including several high rise condominiums.

The Asphalt Division of Allied Chemical Corporation (now Allied Corporation) began a coal tar processing operation at this location in the 1930's, which continued for several decades. In 1974, the property reportedly was sold to its present owners, James Frola and Albert Von Dohln.

In 1977, the property was reportedly leased to the ERP Corporation for the specific uses of oil storage and oil recycling. It appears that ERP subsequently assigned its lease to Edgewater Terminals, Inc., which subsequently assigned its lease to Quanta Resources Corporation in 1980.

The site is approximately 15 acres in size, with a perimeter of approximately 22,000 linear feet and contains 61 above-ground storage tanks with a storage capacity of approximately 9 million gallons (Figure 2). Many of these tanks were constructed in the late 1800's and have walls made of heavy steel panels approximately 3/8" - 3/4" thick. Present roofs are either steel panels or wooden. Most of the largest tanks on site, however, either had no roofs or partially collapsed wooden roofs. In addition, there are approximately 10 unconfirmed underground storage tanks with an estimated capacity of 40,000 gallons.

Large quantities of chemically contaminated waste oil, oil sludges, tar, asphalt, process water, and coal tar by-products were abandoned in tanks at the site. In addition to the bulk liquids stored at the site, about 100 drums containing oils, sludges, contaminated absorbent materials, debris, and uncharacterized materials were staged within the facility.

Secondary containment was inadequate. The C-farm tanks were the only major tanks with a complete concrete secondary containment wall. "Temporary" emergency diking was installed at portions of the facility, however, its long term integrity and reliability was suspect.

1.2. Initial Situation:

Data obtained from the landowner's consultants and contractors was reviewed and utilized as the best initial estimate of volumes and characteristics of the materials on site. However, this data was later often found to be incorrect and was repeatedly revised prior to, and during, the removal action.

Most of the priority tanks contained multiple layering of materials, i.e., oils, aqueous and solids phases. This phase layering made estimating waste volumes extremely difficult even with instrumentation. Estimates of solids volumes and characteristics were especially unreliable.

Phase layer volume measurements and tank engineering assessments conducted during the removal action provided the most accurate volume estimates of materials stored on site. As of March 29, 1985, 548,000 gallons of chemically contaminated oil were estimated to be in the tanks at the facility. Approximately 266,000 gallons of this waste oil were known to be contaminated with PCB's from 50 ppm to 260 ppm. Volatile hydrocarbons including benzene, toluene, trichloroethane, ethyl benzene, and phenol had also been identified in oil samples taken at the facility.

A number of tanks at the facility contained hydrocarbons with flash points of approximately 140° F., and one tank contained 50,000 gallons of liquid hydrocarbons having a flash point of 125°F.

Approximately 2.9 million gallons of aqueous wastes were also initially stored at the facility. Analyses of portions of these wastes indicated Chemical Oxygen Demand (COD) and Total Organic Carbon (TOC) concentrations to be as high as 150,000 ppm and 54,000 ppm, respectively. Levels of cyanide as high as 10 ppm and lead as high as 59 ppm had also been identified in aqueous phases. Chloroform and anthracene had also been identified in the aqueous wastes.

Approximately 1.3 million gallons of waste oil sludges, coal tars and coal tar intermediates were also estimated to be on site.

As a result of the long period of active operations on the site, and poor housekeeping throughout that period, soils have become contaminated with tar materials and oils containing hazardous substances, some of which may have been released during spills. Large deposits of tar and asphalt have been identified in the soils at that part of the facility nearest the Hudson River.

1.3. Cause Of Discharge(s):

Since October 1981, upkeep of the Quanta facility has been minimal. Many of the above ground storage tanks have developed extensive rust and many leaks have developed at tank seams, valves, and transfer lines. Numerous underground transfer lines have not been tested for integrity or destination and several of these lines may provide a spill pathway to the Hudson River. Leaks in two underground tanks had been identified and leaks in other underground tanks were suspected. Large areas of the facility have been frequently flooded for extended periods. This has drastically reduced the available secondary containment and compounded the contamination problems from spillage and leakage.

The onset of winter causes special problems at the facility. Fluctuating winter temperatures has caused water stored in many of the bulk tanks to freeze and thaw, resulting in extensive damage to tank valves and transfer-line joints, causing more leaks and spills.

Drainage from this facility has resulted in a chronic release of contaminated oils into the Hudson River as documented by the U.S. Coast Guard (U.S.CG), the New Jersey Department of Environmental Protection (NJDEP), and the United States Environmental Protection Agency (EPA). Water from the Hudson River freely enters the underground separator discharge line and flushes out quantities of chemically contaminated oil and asphalt products with the rising and falling tides. This has caused numerous intermittent contaminated oily discharges to the Hudson River.

The EPA, alone, documented seven discharges of waste oil between February 1982 and September 1983. In each instance, the amount discharged met the criterion of a harmful quantity pursuant to 40 CFR 110.

The landowners installed a containment boom along the Hudson, however, the boom was not actively maintained and was ineffective in containing the contaminated oily discharges. Any contaminated oil which accumulated behind the boom was not collected and usually escaped into the Hudson on out-going tides.

In addition, several thousand gallons of contaminated oil spilled on the Quanta grounds from tank D-10 in November 1983. That spill was due to an overflow of oil over the tank top as a result of rainwater entering the tank through the partially collapsed wooden roof.

1.4. Threat to Public and Environment:

Bulk storage tanks, drums, and subsurface soils and water contained hazardous substances known to pose serious threats to public health and the environment. These included PCBs and various volatile hydrocarbons including benzene, trichloroethane, ethyl benzene, phenol, anthracene, and chloroform, as well as lead and cyanide.

In addition, material having a flash point below 140°F was stored in bulk storage tanks and presented a very real fire and explosion hazard. In the event of a fire, hazardous volatile hydrocarbons known to be present would pose a threat to the local populace, and considering the large volume of these materials stored on the site, possibly New York City. For example, air monitoring during liquids removal from bulk storage tanks revealed organic vapor levels greater than 400 ppm. Benzene and phenol concentrations of 15.0 ppm and 0.5 ppm, respectively, were also measured in the air.

That 400 ppm value is almost 100 times the recommended Threshold Limit Value - Time Weighted Average (TLV-TWA) value (EPA Standard Operating Guide for

Safety Procedures). Likewise, the 15.0 ppm benzene value also exceeded the 10 ppm TLV - TWA value. The Short Term Exposure Limit (STEL) value for benzene is only 25 ppm. These measurements indicate the serious health threat potential to workers near the site and the general public.

The extensive deterioration of the bulk storage tanks, valves and piping with repeated spills and releases gave great potential for release of hazardous substances into the environment. In addition, there was no type of automatic foam system to fight fires and insufficient site security provided a greater potential for vandalism and arson.

Three major spill pathways lead off the site. A sudden large spill could travel west from the site toward River Road and an active industrial railroad spur. This would pose a direct contact threat to large numbers of persons who utilize River Road. Vehicular traffic could spread contamination over wide areas, including a produce warehouse immediately north of Quanta. Local weather conditions during a spill, explosion or fire could cause additional migration of these hazardous substances and pose additional threats to public health. A representative from the National Centers for Disease Control inspected the site in March 1985 and also concluded that the site presented an immediate threat to public health and welfare.

Spills from the site could also travel directly to the Hudson River or could enter the bordering Spencer-Kellog property on the south and reach the Hudson River via storm drain lines on that property. The lower Hudson River is an important recreational area and is capable of supporting a substantial sports and commercial fishery. It is a major habitat of the Striped Bass, a species which suports a multi-million dollar sports fishery along the east coast.

In conclusion, there were multiple pathways for hazardous substances to migrate off-site, presenting the potential for direct contact by the general public and a threat to the environment.

1.5. Efforts To Obtain Response From Potentially Responsible Parties:

In 1980, Quanta Resources Corporation entered into an administrative consent order with the NJDEP which required environmental cleanup activities to be undertaken and limited on site activities which included the storing, reprocessing, and reclamation of waste oil, oil emulsions and oil sludges. An additional Temporary Operating Authorization (TOA) was issued in 1981. However, in June 1981, analysis of oil intended for commercial use, taken from storage tanks on the site indicated the presence of PCB's in concentrations exceeding 50ppm, a violation of the TOA.

Operations ceased at the site in July 1981, at the direction of the NJDEP, which issued a formal order to cease operations in October 1981. Quanta Resources Corporation filed for reorganization as per Chapter 11 of the Bankruptcy Code and, in November 1981, the Chapter 11 Petition was converted into a Chapter 7 liquidation.

Under threat of federal and state cleanup action, the landowner hired a contractor in the fall of 1982. Until the summer of 1983, the contractor consolidated PCB contaminated oils (>50 <500 ppm) in the 'C' tank farm, attended to small spills, maintained a containment boom in the Hudson River, dismantled sections of transfer piping, installed emergency clay diking, sampled tank contents, constructed an overland discharge line from the facility oil-water separator to the Hudson River, and arranged for the disposal of 200,000 gallons of contaminated aqueous material from a leaking tank. A total of 776,000 gallons of commercially usable oil was legally removed from the facility and sold during that time. No major cleanup or stabilization of the site was achieved, however, and no steps were taken to reduce actual or threatened releases of hazardous substances from the facility to the environment.

In November 1983, the property owners entered into an administrative consent order with the NJDEP, which detailed steps required for a cleanup of the site. However, the requirements of that order were not satisfied.

On April 18, 1984, the NJDEP formally requested that the EPA consider a 'Superfund' contract agreement with the State for a Planned Removal Action at the Quanta Resources site.

In July 1984, EPA commenced an action pursuant to 40 CFR Part 112 against certain alleged owners and operators of the site, for failure to prepare maintain, and implement a Spill Prevention Control and Countermeasure (SPCC) Plan. The deficiencies noted in this administrative action were not corrected and that EPA enforcement action, including the matter of a proposed penalty of $200,000, remains unresolved.

The landowner resumed limited removals of aqueous and oily materials in July 1984. A total of 107,500 gallons of aqueous and 214,500 gallons of oily materials were removed through January 1985.

From September 1984 through March 1985, EPA, the owners of the facility, and representatives of some of the other Potentially Responsible Parties (PRPs), attempted to negotiate a plan to initiate cleanup of the facility, but were unsuccessful.

In view of the deterioration of site conditions and the need for prompt action prior to execution of the "Planned Removal Action", the EPA commenced an "Immediate Removal Action" on April 3, 1985. However, negotiations with PRPs to assume cleanup responsibility continued. On November 27, 1985, the Allied Corporation, representing a group of 62 PRPs, accepted responsibility for surface cleanup under a CERCLA Section 106 Consent Order.

The EPA subsequently issued a CERCLA Section 106 Unilateral Order against 47 non-responding PRPs on October 18, 1985. The landowner was the sole respondent on site on November 12, 1985 as required by the order. (The landowners have cooperated throughout the EPA and PRP removal actions by providing site security, utilities access, and otherwise aiding with on site actions).

1.6. Response Objectives:

The EPA had directed its Technical Assistance Team (TAT) contractor, Roy F. Weston, Inc. to prepare a site mitigation work plan in anticipation of either an EPA or PRP removal action. The plan included a compilation of tank waste volume estimates and waste analyses (Tables 1-3) and a review of tank content measurement technologies. Recommended physical site operations, waste removal, and disposal alternatives and cost and time estimates (Table 4 and Figure 4) for all work actions were also included. A comparison of actual and proposed costs is presented in Figure 5.

The priority Immediate Removal Action objectives were as follows:

1. Contaminated aqueous would be removed from selected tanks including tanks A-7, D-10, and D-11 in order to reduce individual tank volumes below 500,000 gallons, the estimated yard containment capacity. This would increase

the potential for yard containment of any spilled liquids due to tank failure. Liquids would also be removed from leaking tanks and other tanks presenting imminent risk of failure.

2. Inspect, evaluate and repair the existing facility oil/water separator to insure capability of meeting the discharge specifications established by the NJDEP. All drainage lines leading to the separator would be surveyed and cleaned or redesigned to insure adequate facility drainage and reduce the accumulation of oily and soil materials in the lines and in the separator, itself. If economically feasible, the underground discharge line from the separator to the Hudson River would be sealed to eliminate any discharge to the river. This would also prevent tidal flow from the river entering the line. All discharges to the Hudson River would be via the newly constructed aboveground discharge line.

3. All flammable materials (those having a flash point less than 140°F) would be removed from the site, including the 50,000 gallons stored in tank A-2.

4. Improve site security.

1.7. <u>Resources Committed:</u>

On March 21, 1985, an Action Memorandum requesting approval to proceed with both an Immediate and Planned Removal action, including funding exceeding one million dollars and an exemption to the six month time limitation, was approved by EPA Headquarters.

The initial funding request was $564,000 for the Immediate Removal Action and $3,155,000 for the Planned Removal Action. A 10% cost sharing commitment for the Planned Removal was received from the State of New Jersey.

With the failure of the PRPs to respond to the formal EPA Notice Letter, an initial delivery order for

$200,000 was issued to the EPA's Emergency Response Cleanup Service (ERCS) contractor. The EPA initiated an Immediate Removal Action as per Section 104 of the Comprehensive Environmental Response and Liability Act (CERCLA) of 1980, mobilizing the ERCS contractor on site on April 3, 1985.

In May 1985. EPA Region II requested an additional $517,500 to continue Immediate Removal actions. This increase, and other budget adjustments, resulted in a $1,081,500 Immediate Removal budget and a $4.110,000 allocation for Planned Removal actions.

The continued delay in reaching a cleanup agreement with PRPs and continued need for immediate action required EPA Region II to request an additional $500,000 for the Immediate Removal Action. This was granted in July 1985. Ultimately, due to the successful negotiation of a PRP takeover of site cleanup, no Planned Removal funds were expended by EPA as the PRPs commenced the action needed to move to final site cleanup.

The EPA On Scene Coordinator (OSC) John Witkowski, directed the ERCS contractor, O.H. Materials Inc., daily on site. Two TAT members were normally on site under the direction of the OSC, assisting with daily project monitoring, tracking waste removals, maintaining waste inventory records, conducting waste and environmental monitoring, and providing engineering design and review services.

By September 1985, imminent PRP takeover of the removal action was being anticipated and the ERCS contractor was taken off site on September 26, 1985. The EPA funded Immediate Removal Action was concluded on November 27, 1985, the day the Allied Corporation accepted responsibility to remove all surface materials under a CERCLA 106 Consent Order. (See Table 5 for PRP material removal evaluation).

The EPA retained site activities approval authority under the 106 Consent Order and has continued site monitoring and working with Allied and NJDEP representatives to formulate environmentally sound, cost effective removal strategies for the remaining materials.

2.0 MOBILIZATION AND DEMOBILIZATION

The ERCS contractor, O.H. Materials, Inc., began mobilization on site on April 3, 1985. The EPA OSC, TAT, and the ERCS Response Manager and a skeleton crew inspected the site, discussed the EPA site mitigation work plan, and the contractor was assigned priority work tasks. ERCS office and decontamination trailers were brought on site the following day and the landowner gave permission to use a building on site as a staging and storage area. The landowner provided the EPA and NJDEP office space and provided on site assistance and security throughout the removal action.

Utility hook ups were a primary mobilization task. Three (3) utility poles needed to be installed in order to run a feed line from the main line to the trailers and to provide supplementary outdoor lighting. Likewise, multiple telephone lines to the office areas needed to be installed. Potable water coolers (2) and "porta johns" (2) completed the essential services necessary on site. An outdoor shower was installed in the central yard after the fire hydrants were fully operable. A site safety plan was developed by the ERCS contractor and was revised as additional work tasks were initiated throughout the removal action. Waste removal actions began on April 5 and are detailed in Sections 5.0 and 6.0 of this report.

By September, ERCS site activities were being reduced pending an imminent PRP takeover of the cleanup. All ERCS personnel and major equipment items were demobilized from the site on September 26, 1985.

The ERCS contractor continued to provide equipment, supplies and/or manpower on an as needed basis until November 27, 1985, when the EPA removal action was officially concluded.

3.0 SITE ADMINISTRATION

Planning, managing, and monitoring a removal action of this magnitude required a well organized and consistent management program. A site mitigation work plan, which included a waste removal systems analysis, was developed, followed, and updated (see Table 6). Depending on the nature of the daily actions, at least one man day per day (TAT and/or EPA) was required to maintain all necessary documentation.

Maintaining responsible site management entailed the following recordkeeping:

Personnel Entry and Exit Log - daily

Equipment and Supplies Entry and Exit Log - daily

Daily Work Order - Daily; authorized ERCS contractor personnel. equipment, supplies and assigned work tasks

Contractor Cost Report (1900-55) - daily

Incident Obligation Log - daily; cost accounting

POLREPS - weekly or bi-weekly; site activity status and financial report

EPA & TAT Logs - daily

Waste Manifests - daily as needed; waste removal documentation

Tank Inventories - daily

Waste Removal Records - daily

A daily work production meeting was held with the TAT and ERCS contractor and was an important tool in maintaining personal contact with key personnel during sometimes stressful working conditions and in planning and reviewing site activities.

The TAT instituted and maintained a pilot computer support program from April through June. The on-site use of the COMPAQ Microcomputer with Lotus, D-Base III and Volkswriter software greatly expedited administrative tasks which accompanied the diversity of concurrent tasks on site. Computer files were maintained for:

tank inventory data including waste phase volumes, ullage measurements, and removals; waste manifest documentation; multiple chemical analysis of diverse matrices involving over 100 parameters; and for completing POLREPS on site.

The ERCS contractor instituted a similar computer system on July 3, 1985, primarily to generate Contractor Cost Report forms. The system greatly reduced mathematical errors and clarified and standardized the reporting format given to EPA. This was an important improvement given the high ERCS personnel turnover on site.

4.0 SAFETY OPERATIONS

Primary safety considerations involved the physical and respiratory protection of personnel responsible for waste transfer operations and minimizing the danger of physical hazards to all personnel; i.e. overland and aerial piping, holes, depressions and other areas of unsure footing. These site dangers were greatly compounded during rains and frequent yard flooding.

The ERCS contractor was required to submit a site operations safety plan for EPA approval and to update as work tasks were added. An ERCS safety/production meeting was held each morning prior to any site activity. The continual review of safety requirements and on site hazards contributed significantly to the excellent safety record. Stressing safety requirements was especially important since multiple crews were often involved with different tasks throughout the site, and personnel turnover was high.

The safety record was especially commendable considering the number of tasks undertaken, including the large volume of materials taken off-site by trucks and railcars, often during stressful conditions. No significant mishaps occurred during the over 12,000 man hours expended on cleanup activities.

The safety plan required distinct basic levels of protection in delineated zones on site; "clean", "safety" and "exclusion" (Figure 2A). These requirements were augmented depending on work area, weather conditions and results of prior or concurrent monitoring. The TAT and EPA continually monitored site activities to insure that safety plan requirements were being followed by all personnel on site, not just the ERCS contractor.

Aerial and on-ground piping in the "A" and "D" farms presented the major physical hazards on site. Due to the duration of the action, it became prudent to remove these hazards during the course of the removal. Areas with uneven contours or holes were cordoned off to routine entry and exit, particularly during rain and flooding.

An adequate firefighting system was also essential. Additional fire extinguishers were brought on site and all were inspected and tested for proper operation. Hydrants and valves were also checked and repaired as necessary and hoses were placed adjacent to the working hydrants. A fire map was prepared and placed in all areas of the plant so that locations of shut-off valves and fire hydrants were readily available to all personnel (see Fire Map, Figure 3).

Twenty 5-gallon pails of foam were purchased for use on oil or electrical fires and drills were conducted periodically to insure that ERCS personnel were familiar with all equipment and procedures. This firefighting capability was essential since an extensive bulk tank and building decommissioning program was being conducted at the former Spencer-Kellog facility bordering the site. There were at least two major fires at that facility during the summer and at least three responses by Edgewater Borough firefighting apparatus. A fire watch had to be kept during especially busy periods of tank cutting adjacent to the Quanta property line. During this time, "D" farm tank tops were repeatedly wetted down to prevent fires from starting on the wooden roofs from the continual streams of sparks blowing onto the property.

Hurricane Gloria (September 26-28, 1985) presented the last site hazard. Lines and wires securing the tank covers placed on the "D" and "A" farm tanks were secured and all loose material was secured in buildings on site. Severe flooding occurred, but there was no major physical damage to tanks, piping, grounds or buildings.

Air monitoring was conducted by the TAT during waste transfer and tank cleaning operations (data compiled in Appendix D). Primary monitoring was conducted using an HNU Photionization Analyzer or Century Organic Vapor Analyzer. Draeger tubes were also utilized to monitor selected compounds.

Monitoring during waste transfer was conducted in three general areas; adjacent to the receiving truck vapor vent or hatch, the 5-10 foot working area around the truck, and outside the truck loading area.

Measurements in and outside the loading area were normally at background levels (1-2 ppm), while HNU readings taken adjacent to truck hatches or vents ranged from 20-400 ppm. Toluene and/or benzene were the compounds most commonly measured using Draeger tubes. Positive readings were only recorded adjacent to vents or in the immediate pumping area (25-30 ppm). A possible trace of hydrogen cyanide was recorded once.

As can be seen by the data, there was a high degree of variability in air quality in the waste transfer operation area. This was attributed primarily to the varying characteristics of the wastes on site. However, residual vapors in the tank trucks from their previous cargos and local winds contributed to some of the variability.

Additional air monitoring was required prior to tank cleaning and tank roof construction operations to guard against working in potentially explosive environments. Lower explosive limits and percent oxygen readings were taken prior to those activities; no acute readings were recorded.

5.0 Site Stabilization and Waste Removal Operations:

5.1. Removal Monitoring And Recordkeeping:

Determining actual volumes of wastes on site and being removed was essential for planning, projecting and tracking removals and costs. Well organized monitoring and record tracking procedures needed to be developed and followed.

The volume of wastes being removed by individual tank trucks or railcars was determined by taking a tank outage (height of unfilled portion of tank) and determining the waste volume using a tank calibration chart (Table 7). In addition, trucks and tankers were weighed prior to and after filling and specific gravity of the waste was measured to provide an alternate calculation of waste removed.

Each shipment was documented using a uniform hazardous waste manifest and the volumes recorded on the manifests were calculated using the above methods. A total of

258 truck and railcar shipments (2,607,383 gallons) were manifested off the site for treatment and disposal from April 5, 1985, through November 27, 1985 (Appendix E).

The volume of wastes removed was corroborated daily by measuring volume changes in bulk tanks. Each tank height, circumference and diameter was measured and the total and per inch volumes calculated. Volume of wastes transferred between tanks within the site and removed off site could be calculated by measuring tank outages before and after liquid transfers. Daily tracking records (Figure 6) and tank inventory charts (Figure 5) were developed to track waste movements and calculate current inventories and volumes of specific wastes removed. Methodologies considered and utilized to measure volumes of waste phases in individual tanks are described in Section 9.0.

5.2. Waste Removal Priority:

An initial tank priority for waste removal was established based on EPA/TAT inspections and historical tank content analytical data. Priorities were continually expanded and revised as new analytical data became available, actual tank volumes were confirmed, and conditions of tanks, valves and piping deteriorated. (See Section 9.0 for description of tank waste profile and tank integrity studies).

Initial conditions were worse than expected. Inspections revealed that tank A-4 had multiple leaks, as did tanks D-7 and D-13. Tank D-13 was listed as empty, but instead was approximately 2/3 full. Tank D-14, an open tank initially listed as half full, was found to be within two feet of overflowing. Tank B-9 was also found to be within one foot of overflowing. Other anomalies in the historical data also exacerbated the situation.

A waste removal systems analysis, established in late April and expanded and revised in early May, provided criteria for establishing removal priorities (Table 6). Rationale for selecting tanks for priority removals was as follows:

Tank A-1: Estimated volume 144,000 gallons - 129,000 gallons aqueous phase and 15,000 gallons oily phase. Tank adjacent to temporary berm makes for a special spill pathway hazard. A major rupture would easily breach the berm and the spill would travel in the direction of a major traffic artery and bus stop. Elevated levels of lead and cyanide previously measured.

Tank A-2: Estimated volume 148,000 gallons - 112,000 gallons aqueous phase and 36,000 gallons oily phase. Like A-1, its location adjacent to temporary berm makes it a special spill pathway hazard. A major rupture would easily breach berm and the spill would travel in the direction of a major traffic artery and bus stop. Flash point of oily phase is less than 140°F, constituting a fire hazard.

Tank A-4: Deteriorating tank with leaking valves and corrosion along tank base. Liquid volume estimated as 454,000 gallons 250,000 gallons aqueous phase and 204,000 gallons oily phase.

Tank A-6: Original minor tank valve leakage had increased to 150 gpd. Elevated organic vapor measurements taken adjacent to dripping contaminated aqueous/solvent mixture. Sparks observed in flame test confirmed presence of solvents in leaking aqueous. Elevated levels of cyanide previously measured.

Tank A-7: Estimated volume 526,000 gallons -- 460,000 gallons aqueous phase, 66,000 gallons oily phase. Volume exceeded yard capacity. Tank was deteriorated, having numerous leaks from side wall panels, rivets and valves. Foundation is in poor condition and there was only a partial roof.

Tank B-5: Minor leakage originally observed had increased to 10 gpd. Adjacent tank was partially collapsed and was potential threat to tank integrity if further collapse occurred. Tank also had badly corroded tank supports.

Tank C-10: Estimated volume 26,000 gallons -- 23,100 gallons aqueous phase and 2,900 gallons oily phase. Previous analysis of the aqueous phase revealed an elevated cyanide level. The emptied tank needed as a bulk storage/mixing tank for transferring liquids to railroad tank cars for removal and disposal.

Tank C-11: Estimated volume 22,500 gallons -- 21,000 gallons aqueous phase and 1,500 gallons oily phase. Previous analyses revealed elevated cyanide in the aqueous phase. The emptied tank needed as a bulk storage/mixing tank for transferring liquids to railroad tank cars for removal and disposal.

Tank D-8: Estimated volume 499,000 gallons -- 243.000 gallons oily phase and 256,000 aqueous/sludge phase. Volume exceeded yard capacity. Tank was deteriorated, as was roof, allowing rainwater to enter tank. Imminent tank failure feared due to extreme corrosion of tank walls. This tank was originally thought to contain only 50,000 gallons of aqueous and oil.

Tank D-10: Estimated 981,930 gallons - 942,000 gallons aqueous phase, 40,000 gallons oily phase. Volume exceeded yard capacity. Major rupture would easily breach temporary berm and enter river and adjacent property. Tank, roof and foundation all deteriorated. Tank known to contain a mix of aqueous wastes.

Tank D-11: Estimated volume 585,000 gallons -- 288,000 gallons aqueous phase, 184,000 gallons oily phase and 113.000 gallons solids. Tank volume exceeded yard capacity. Previous content analysis indicated elevated levels of cyanide and lead in aqueous phase. Tank was deteriorated and leaked from side sampling valves. Portions of roof missing.

Tank D-13: Estimated volume 44,000 gallons -- 39,500 gallons aqueous phase, 4,500 galllons oily phase. Originally reported to contain only 6,600 gallons. Aqueous phase contained elevated levels of cyanide and lead. Noticeable leakage from valve increased to 150 gpd and necessitated removal of contaminated aqueous to below valve level. Top wall panels corroded completely through. Elimination of vapors from leakage would decrease health risks to personnel. A major rupture would breach temporary berm and enter Hudson River.

Tank D-14: Estimated volume 148,000 gallons -- 145,500 gallons aqueous phase, 2,500 gallons oily phase. Previously observed only half full, tank content level was one foot below hole in wall and two feet from tank rim at beginning of removal action. Overflow of tank deemed imminent. Tank deteriorated with open roof, valves leaking at rate of 10 gpd, and bottom corrosion. A major rupture or overflow would breach temporary berm and enter Hudson River.

5.3. Tank Truck Operations:

Waste removal began on April 5, 1985, immediately after initial mobilization. Aqueous phase wastes were the predominant wastes removed, since they were the largest known volume of waste and constituted the greatest spill threat on the site. Freezing of the material presented an additional threat to the stability of the tanks, valves and piping. In addition, waste characterization analyses had already been performed and the wastes could be treated by known treatment-disposal companies. These initial shipments of aqueous waste were sent to Waste

Conversion, Inc. of Hatfield, Pa. and continued until bulk removal of non-oily aqueous to the E.I. DuPont, Deepwater, New Jersey facility could be accomplished. DuPont could not accept oily aqueous waste (normally found in cuff layers), which continued to be removed to Waste Conversion, Inc. (Waste Conversion did not have railcar handling capability).

Aqueous waste was initially removed by running 3" hoses over the tops of the tanks and into the aqueous layer. The hoses were attached to vacuum trucks, which pumped the waste from the tanks into a tank truck for removal. Truck loading areas were established adjacent to tanks A-2, A-7, D-12, D-10 and the C-farm. Sufficient manpower allowed simultaneous loading of tankers which expedited waste removal. Each truck was inspected to insure the tank was empty prior to use and that the truck was fully licensed and registered. Those few that were not, were turned away empty. Air monitoring was conducted during waste removal operations and is described in Section 4.0.

A total of 463,186 gallons of aqueous waste was removed during the initial "over-the-top" pumping phase in April and May (see Table 8). Since "lift capacity" of the vacuum trucks would soon be exceeded, side access to tank contents was instituted using "hot tap" valves (see Section 5.4).

Significantly smaller volumes of oils and pumpable sludges were removed to Waste Conversion during the course of the removal and are discussed in Sections 6.2 and 6.3.

5.4. <u>"Hot Tap" Valve Installation</u>:

A procedure for installing external valves on a filled tank was investigated and then utilized on tanks A-3, A-4, D-8, D-10 and D-11. This process, known as "hot tapping" or "hot tap" valves greatly facilitated the removal of aqueous wastes from these large priority tanks (see Table 9).

This procedure involved the welding of a flanged nozzle on the outside of the tank in the exact location of the new valve. A gate valve, with a full port opening, was then bolted to the nozzle and a special drilling machine fastened to the valve. This machine drilled through the tank wall making an opening in the tank the size of the new valve. (The "hot tap" machine is sealed so that no liquid escapes). A test valve on the machine was then opened to insure that the hole had been drilled completely thru the tank wall. This machine can be operated manually by hand crank or mechanically with an air compressor. "Hot tap" installations range from 2" to 12", however, the most preferred sizes are 2", 3" and 4".

These "hot tap" valves were installed just above the bottom of the aqueous layer in each tank (Figure 8). Locating these points required accurate identification of content layers (described in Section 9.0). Duplicate valves had to be drilled 2' apart (vertically) in tanks D-10 and D-11, since tank content measuring instrumentation could not precisely define the phase changes (cuff layers). However, the valves in the aqueous-solids cuff layers later proved valuable for sampling and for drawing off "pumpable solids" into tank trucks for removal and treatment at Waste Conversion.

The use of these valves meant substantially less down time when setting up or switching tanks for waste removal, reduced potential of spills when disconnecting hoses from vacuum trucks, eliminated the need to constantly adjust the length of hose in the tank, overcame lift potential limitations, thereby increasing the speed of waste removal, and eliminated roof top hazards to the work crew. Also, it would have been impossible to conduct inter-tank transfers of such large volumes of waste, as well as to pump wastes directly to railcars without these reliable valves.

5.5. On Site Treatment System Option:

Two long term aqueous waste removal options were seriously considered; bulk removal for treatment and discharge at the E.I. DuPont, Deepwater, New Jersey facility and on site treatment with treated aqueous discharged to the Hudson River.

The ERCS contractor was charged with designing an on site treatment system with discharge criteria being the on site oil/water separator NJPDES discharge limitations (Figure 9). The proposed system included an oil/water separator prior to the addition and mixing of chemical flocculents to the aqueous to enhance solids removal. The solids would be dewatered in a belt press while the aqueous would be further treated in an aerated activated sludge tank for BOD reduction. The aqueous would be discharged to the Hudson after final filtration through sand/redecca filters. Approximately 200 tons of sludge would be generated, assuming treatment of 500,000 gallons of aqueous wastes. This additional hazardous waste would have to be disposed in a suitably licensed landfill.

Costs were estimated, conservatively, at $0.50/gallon for treatment and discharge of aqueous, plus approximately $0.40/gallon for sludge disposal. In comparison, disposal at DuPont by bulk rail shipments was $0.25/ gallon, including transportation.

The continued potential liability of the waste sludge disposed in a landfill and the $0.90 total/per gallon aqueous treatment and disposal cost combined to make this an unsatisfactory option, and was discarded in favor of bulk rail removal for treatment and disposal at the DuPont facility.

5.6. Railcar Operations:

The aqueous treatment cost at DuPont, using railcar transportation ($0.25/gallon), was substantially less than at Waste Conversion ($0.47/gallon plus transportation), or on site treatment and justified the renovation of the on-site rail spur. The spur ran in a southerly direction from the "B" to the "C" farm and then easterly to the "D" farm (see Figure 2). The spur had been inactive for many years and a railroad construction subcontractor was hired to renovate approximately 500 feet of track.

The renovations included:

- Digging out spur switch gear and activating the mechanisms.
- Replacing deteriorated railroad ties.
- Replacing defective rails.
- Levelling and gaging tracks.

After renovation, as many as five DuPont railcars were on site at one time to be filled with non oily aqueous waste.

Select "B" and "C" farm tanks were chosen for use as intermediate bulk storage for "A" and "D" farm aqueous wastes being transferred to railcars. Temporary storage in these tanks would allow separation of any oils in the aqueous prior to actual pumping to the railcar and prevent oils from inadvertently going to Deepwater. The wastes temporarily stored in the "B" and "C" farm tanks were either gravity fed or pumped using site pumps to the nearby cars.

Liquid wastes first were pumped from tanks B-1, B-2, C-5, C-10, and C-11 and removed off site to Waste Conversion for disposal. Pumpable sludges were also sent to Waste Conversation for treatment, while the heavier sludges were transferred to cut off tank S-1 for temporary on site storage. These tanks were then "rinsed" and partially filled with aqueous to remove remaining oily sludge and insure hatch integrity. These tanks were then suitable for intermediate storage of aqueous being moved off site by railcar.

From 6/20/85 to 11/27/85, twenty-eight (28) railcars were filled with 643,134 gallons and shipped from the site to DuPont, Deepwater without mishap. One additional car with a defective valve could not be filled and was returned empty.

The same preparation and cleaning procedure was also followed with tank C-8, that tank being used to concentrate potential recyclable oil stored in other tanks. Approximately 11,954 gallons of oil were transferred into that tank from tanks A-1, C-5, D-26 and D-27.

and being discharged to the river or (later) clogging the sand filters. The oils would be retained in the top of the first and second compartments, while the sludge would be retained in the first compartment.

The repairs included sealing all the original bottom openings to prevent short circuiting of the water flow through the separator, sealing the cracks in the outside walls with "water plug" to prevent water flow either into or out of the separator, and cleaning and coating the interior walls with two layers of "thoroughseal" to prevent leakage through the compartment walls.

The separator was operated manually. The normal water level in the separator was maintained approximately two feet above the top of the influent pipe. An influent line valve regulated inflow into the separator.

The treated water was pumped from the last compartment through two small sand filters to the river. A large two cell filter system was installed in June. The system included one cell filled with sand and a second cell filled with imbiber beads, which removed any traces of oil which might have passed through the system.

When yard water removal was necessary, the large filter system would generally be put in operation; however, during heavy rains the small filters would also be utilized. A discharge line by-pass valve, which re-routed some of the treated water back to the head of the separator, regulated the separator discharge rate.

The discharged water was passed up through the sand filter, where solids were removed, and then through the imbiber bead cell, where any oils which passed through the separator and sand filter were removed.

The normal operating pressure on the inlet side of the filter was 10 psi; when this inlet pressure reached 20 psi, the clogged sand required regeneration. This was accomplished by reversing the water flow in the filter and discharging into the head end of the

5.7 Oil/Water Separator Renovation and Operation

The yard drainage system consisted of a series of trenches and catch basins connected by an underground line to an in-ground oil/water separator. The separator consisted of seven compartments with a submersible pump located in the last compartment to pump the yard water through a filter system to the Hudson River via an above ground discharge line (see Figure 10). The separator required extensive repairs and re-design to effectively treat the yard water prior to discharge to the river.

The re-design (see Figure 11) included the installation of overflow pipes in compartments 2 and 3, and proper sized and located openings in compartments 1, 4, and 5. The wall openings and overflow pipes were installed to produce a serpentine flow pattern between compartments to maximize retention time in the separator. The wall openings and the bottom of the overflow pipes were located 1.5 feet above the bottom of the separator to prevent solids from moving through the separator

separator. Clogging of the filter necessitated periodic replacment of the sand media.

The oils trapped in the separator were removed by sorbent pads or vacuum truck. These oily pads, as well as the sludge, spent imbiber beads, and sand were stored in cut-off tank S-1, pending ultimate removal and disposal off site.

5.8. Tank Covering Operations:

By July, it had become increasingly apparent that the site cleanup would require an additional two years of effort. Therefore, the viability of covering seven of the tanks whose roofs had collapsed, or partially collapsed, to eliminate the generation of additional waste volume from precipitation during that period was examined.

The tanks were constucted in the late 1800's. The sides were constructed of heavy steel plates approximately 3/8"-3/4" thick welded or riveted together. Tank diameters ranged from 20-62 feet; original tops were supported by 3"x12"x31' wooden beams, supported by a center post and the tank walls.

All the partial roofs were checked to determine which were structurally safe for the personnel who would have to use the roofs for either outage measurements, phase profiling, or other work tasks. The center support posts were also checked to determine if they could be used for the design being considered or if a "no center support" design would have to be used. The outside bearing edge of each tank was also checked for support of the new roof.

The following tanks were considered for covering; A-7, D-8, D-10, D-11, D-12, D-14, and D-15. The D-12 and D-14 tanks required the construction and placement of wooden roofs before covering. The partial A-7 roof would have to be removed prior to the construction of a new roof, while the remaining tank roofs would have to be repaired prior to covering. Tanks A-3 and A-4 were not considered since the aqueous waste in those tanks could be economically treated in the separator and sand/imbiber bead filters and discharged to the Hudson River.

The estimated cost for tank covering was $105,000, the work to be completed in three weeks, depending on the other work tasks required at the site during that period. The covers selected were constructed of reinforced vinyl having a useful life of 10 years with little or no maintenance and tested fire retardant. Engineering design was developed by TAT in consideration of the limited labor skills available and safety plan requirements.

Projected rainfall accumulations in these tanks were calculated utilizing 1984 meterological data from the nearest monitoring station, Central Park, New York City. Conservatively assuming that only 50% of the rainfall actually enters the tanks being considered for covering would mean an increase of 22,200 gallons of oily aqueous waste per month. At the current disposal cost of $0.75/gallon for this type of waste, additional removal costs would average $16,650/month for the life of the tanks. The "payback" period for tank covering was calculated at 6 months while the cost savings was projected to be $565,000 during the next two years. The economic analysis certainly justified covering the seven tanks. Aside from the purely economic considerations, additional benefits accruing from covering included reducing site safety hazards, unforeseen maintenance, emergency cleanup costs, and air pollution.

The new roofs were designed and constructed so that minimum work would be done on top of the tanks. Minimizing the work above the tanks, to avoid prolonged work in any vapors and the danger of falling into the waste, was the primary criterion in designing the roofs.

The selected design utilized wooden joists to span the tops of the tanks (Figure 12). The longest joist available was a 35 foot span. The joists were constructed with 2x4's joined together with metal bar joist brackets. Therefore, for the 62 foot diameter tank (A-7), the existing center post had to be used. That center post was checked from a crane basket to determine its structural suitability prior to finalizing the roof design.

All roofs were preconstructed on the ground prior to actual placement on a tank. A circle having the appropriate tank diameter was scored on the macadam. The center joist assembly was then placed in position and a working platform of 1/2" plyscore was nailed on top. Rafter brackets were then fastened to the top side of the platform at two foot intervals. Rafters were cut at the proper angles to fit in the brackets and lie properly on the tank walls, allowing for a 6 inch overhang. Plyscore was then laid out on top of the rafters and trimmed. Finally, all the parts were numbered and then broken down for actual placement and construction on the tank (Figure 13).

The center joist assembly and working platform was hoisted first and placed on the tank using a crane. Rafters were subsequently placed in position by two workers on the platform and another on a ladder on the tank wall. The plyscore was then hoisted and nailed in place.

A pre-cut 100 mm fiberglass reinforced fire proof vinyl cover was lifted onto the roof and unfolded in correct position. A 1/4" steel cable was then woven through grommets on the bottom of the cover, and tightened with several turnbuckles to secure the cover tightly to the tank. Additional 1/4" nylon ropes were also fastened around the cover on the tank wall and across the top of the tank to further reduce the possibility of winds shifting or otherwise damaging the covers (Figure 14).

The 68 foot diameter A-7 tank necessitated additional work. Six additional joists needed to span the top were constructed on the ground and required careful placement on the tank top prior to rafter installation (Figure 15). Also, a steel center column cap had to be fabricated and placed on the center post to support the center joist (Figure 16).

Construction and placement of the roof and covers for the seven roofs was completed in 20 days without interfering with other priority work tasks. This roof installation method proved to be a safe and relatively simple method to provide long term security and to prevent the continued generation of additional waste from precipitation entering the tanks.

6.0 WASTE REMOVAL SUMMARY:

Most of the bulk tanks contained multiple layers of waste materials - oils, aqueous and solids. Innovative phase layer measuring instrumentation (described in Section 9.1) was used to estimate phase volumes. However, characterization of some of the materials, particularly the solids, was incomplete, since they could not be sampled effectively. Planning disposition strategies for these materials was very difficult, since disposal alternatives and anticipated costs could not be confidently projected. Also, suitable and reasonably priced disposal alternatives for ignitable material and PCB >50 ppm contaminated oils were not available.

Every effort was made to investigate alternatives whereby materials would be treated and destroyed or treated and recycled as a product or energy source, rather than traditional disposal in a landfill. While time consuming and uncertain, that policy will pay dividends in this instance. Approximately, 1.2 million gallons of material will be legally recycled or treated and used as an energy source that otherwise might have been disposed of as waste.

Finally, the notorious reputation of the facility may have been a deterrent to some disposal/treatment purveyors who otherwise might have been able to treat, recycle or dispose of portions of the material stored on the site.

Waste removals began immediately following initial mobilization. As previously stated, aqueous was the predominant waste phase removed, being the largest volume of waste and constituting the greatest spill and tank rupture threat on site. A month by month summary of removals and waste inventories are described in Figures 17 and 18.

6.1 AQUEOUS:

The initial aqueous removals were conducted by "over-the-top" pumping from D-farm tanks to tank trucks. A total of 463,186 gallons (85 trucks) were removed, treated, and disposed of at the Waste Conversion, Inc. facility in Hatfield, Pa. See Table 8 for removal information per tank.

Operational side or bottom valves (or open side ports) and the installation of "hot tap" valves on additional tanks greatly facilitated waste removals. An additional 475,368 gallons of aqueous wastes were removed to Waste Conversion by 93 tank trucks (Table 9) using these methods.

After contractural arrangements were completed with DuPont, the majority of non oily aqueous waste was removed to its Deepwater, N.J. facility. From June 6 to September 25, a total of 15 tank trucks and 21 rail cars removed 528,238 gallons of non-oily aqueous wastes to Deepwater. Removal of wastes by rail tank car to Deepwater (begun June 20), resulted in a considerable cost savings. (See Section 5.6).

The third disposal option for aqueous wastes was on site treatment with discharge to the Hudson River. Prior analysis of tanks A-3 and A-4 aqueous indicated suitability for treatment through the on site oil/water separator and sand/imbiber bead filter and discharge to the Hudson River. A total of 780,308 gallons was removed in this environmentally safe manner at a savings of $250,000 - $300,000.

A total of 2,420,629 gallons of aqueous waste was removed during the removal action.

6.2 WASTE OIL:

Prior analysis of waste oils on site indicated that some oils could be removed for recycling as a fuel at no net cost to the government. A total of 9,360 gallons (4 tank trucks) of waste oil was removed from tanks A-1 and A-2. However, a difference between the broker analysis and the prior and current site data resulted in a substantial charge for the oil. In addition, it was learned that the broker serviced both private and commercial accounts and did not segregate industrial waste oils from other stocks. For these reasons, therefore, waste oil removals were discontinued.

However, transfer and segregation of higher quality waste oils on site was initiated. A total of 15,054 gallons stored in tanks A-1, C-5, D-26 and D-27 was transferred to tank C-8 for future use as an energy source, either by itself, or to be mixed with other waste oils or solids on site.

6.3 SOLIDS:

Solids were of two general types; a "soft" watery, sometimes pumpable solid and "hard" solids, most probably tar products. Some "soft" solids were removed during the course of the aqueous removal, occassionally "topping off" tank trucks partially filled with aqueous or oily aqueous. Four full and two partial truck loads accounted for 19,985 gallons removed. "Hard" solids were removed from tanks C-5, C-8, C-10 and C-11 during their preparation as storage/transfer tanks, primarily for aqueous removal by rail car. A total of 5,126 gallons was removed to cutoff tank S-1, pending ultimate removal off site.

The heavier denser solids subsequently were determined via tests to be coal tar products. These were classified for reclamation for future use. The "soft" solids were analyzed for utilization as an energy source mixed with oils or following additional treatment.

6.4 YARD WATER:

Yard water was primarily on site precipitation and, as such, was not a RCRA hazardous waste. The water was treated through the oil/water separator and sand/imbiber bead filters prior to discharge to the Hudson River: discharge quality was defined by the State of New Jersey. Although not strictly required, a permit for this discharge was obtained (Figure 9). Discharge analyses (Appendix C) indicated compliance with all permit limitations.

Managing the large volumes of yard water was critical to the safe, efficient functioning of all the other priority on-site activities and justified the renovation of the oil/water separator for long term service. A total of 4,455,230 gallons was treated and discharged to the Hudson River during the removal action.

6.5 SUMMARY:

A summary of disposal off site is as follows:

Waste	Volume (gal.)
1. **Aqueous**	
A. No. of trucks-238	1,190,587
B. No. of rail cars-21	449,734
C. To Hudson River	780,308
D. Total	2,420,629
2. **Waste Oil**	
A. No. of trucks-4	9,360
3. **Solids**	
A. No. of trucks-4	19,985
4. **Yard Water**	4,455,230
5. **Total Waste Removed** (Excluding yard water)	2,449,974

*See Appendix D for RCRA Disposal Facilities Compliance reviews and offsite disposal policy compliance documentation.

7.0 WASTE CHARACTERIZATION:

7.1 Aqueous:

Analyses of aqueous or oily aqueous phases from tanks A-1, A6, A-7, D-8, and D-10 were conducted during the removal action to characterize the wastes, plan removal options, and evaluate hazards and risks to workers, the general public and the environment. Analytical data is tabulated by tank in Appendix B.

Results consistently indicated the presence of numerous organic compounds, including those closely associated with coal tars. Of the volatile compounds measured, methylene chloride (5.6-35 ppm), and phenol (1.5-29 ppm) were most common. Trichloroethene, 1,1,1-trichloroethane, and benzene were also measured at levels ranging from <0.05-4.6 ppm. Cyanide levels ranged from 1-4 ppm while TOC analyses ranged from 410-8,900 ppm.

Previous analyses of tank A-3 and A-4 aqueous phases indicated that this material could be discharged to the Hudson River after treatment through the on site separator and sand/imbiber bead filter system.

Analyses conducted during the removal confirmed those predictions. Total organic compounds were less than 0.4 ppm in the A-3 aqueous. The A-4 aqueous had substantially higher values of organic compounds (0.05-25 ppm), again, many of which are associated with coal tars, i.e. napthalene, acenaphthene, fluoranthene, etc. A phenol concentration of 16 ppm was also measured. TOC values from both tanks were the lowest on site, 48 and 69 ppm, respectively. Heavy metal concentrations were generally negligible, ranging from <0.05 to 0.56 ppm.

7.2 Oil:

Physical measurements of surface waste oil in bulk tanks were conducted to establish removal priority of any highly flammable material and to establish the potential market for recyclable oils from the site. All samples, with the exception of those from A-1 and A-2, were surface skim samples which would be expected to have the least water of any portion of the oil layer. As such, the bottom sediment and water (B S & W) values were consistently non-detectable (trace). In comparison, the A-1 and A-2 samples from 1 and 2 foot depths had values of 30-60% bottom sludge water ratio (B S & W). Most oils had flashpoints of 200-270°F. The B S & W, flashpoint, and API gravity measurements are listed in Table 6. Chemical analyses of waste oils from Tanks D-26 and D-27 were generally qualitatively consistent with soil and, to a lesser degree, aqueous analyses. Coal tar associated compounds were most common and ranged from 0.2 to 0.6 ppm in D-27 and 0.7 to 2.1 ppm in D-26. Methylene chloride, phenol, and benzene were also detected in concentrations of 0.010 ppm or less.

7.3 Solids:

Tank bottom solids were apparently a result of waste oil and/or coal tar processing. Coal tar associated products dominated the S-1 composite sample results. Values ranged from 8,000-34,000 ppm. The C-5 solids analyses for those compounds, in contrast, were substantially less (140-810 ppm). Heavy metal concentrations, not surprisingly, were elevated. Copper, lead, and zinc levels from each tank ranged from 1,000 ppm to 6,900 ppm. Cyanide (9.4 and 14 ppm) and phenolics (95 and 660 ppm) were other major hazardous substances. The 9,100 BTU/lb values indicated potential as an energy source in an approved facility as a means of ultimate disposal.

8.0 ENVIRONMENTAL MONITORING:

During the course of the removal action, air, soil, subsurface water, separator influent and discharge samples were obtained and analyzed for various priority pollutants. Results of environmental monitoring are tabulated in Appendix C.

8.1 Air:

Ambient air quality was measured initially, and throughout the removal action, utilizing an HNU photoionizing detector. Measurements were concentrated in the "D" and "A" farms where odors were detected prior to and during the initial phases of the removal. All values in these areas were, however, at background levels. Additional HNU monitoring and Draeger tube analyses for specific parameters were conducted during waste transfer operations and are discussed in Section 4.0, "Safety Operations".

8.2 Soil:

A soil sample approximately 5 feet below grade was obtained while drilling holes for utility pole placement in the central yard. The sample indicated the presence of coal tar products including napthalene, fluorene, phenanthrene, anthracene, and benzo (a) anthracene. Concentrations ranged from 1,000 ppm to 12,000 ppm. Elevated levels of benzene (200 ppm), toluene (170 ppm), ethyl benzene (200 ppm), arsenic (730 ppm) and cyanide (4.6 ppm) were also measured. PCBs were not detected (< 5 ppm).

In addition, bands of oily contamination were visible whenever utility pole, hydrant or water line excavations were undertaken, indicating wide-spread subsurface contamination throughout the site.

8.3 <u>Subsurface Water</u>:

Analysis of a subsurface water sample from a utility pole hole indicated similar contaminants. Elevated phenol, toluene, napthalene, benzene, dimethyl phenol and ethyl benzene levels were found with concentrations ranging from 1.1 to 21.0 ppm. Again, PCBs were not detected (< 5 ppb).

8.4 <u>Separator Influent and Effluent</u>:

The frequent ponding or flooding of the site required optimal operation of the on site oil/water separator. A discussion of the work conducted to renovate and upgrade the separator was presented in Section 5.7.

The water entering the separator was predominantly surface runoff from precipitation, although the high water table and the aged underground pipelines undoubtably allowed some groundwater contribution. Influent water analysis revealed the presence of compounds similar to those identified in the subsurface water and soil. Concentrations were most similar to the subsurface water data. Again, coal tar products, including napthalene, acenaphthylene, fluorene, phenanthrene, and pyrene were found, in concentrations ranging from 0.1 ppm to 11.0 ppm. Elevated levels of phenolics (17.0 ppm), benzene (1 ppm), and TOC (160 ppm) were also measured. Again, PCBs were not detected (< 5 ppb).

The separator discharge was in compliance with the New Jersey Pollutant Discharge Elimination System (NJPDES). Discharge limitations for individual compounds are listed in Figure 9. Separator discharge samples (with no additional filtering) were taken on 5/2 and 5/22/85. The initial sample included a mixture of yard water and tank A-4 aqueous, while the latter sample was solely yard water.

Both analyses indicated compliance with NJPDES discharge requirements. Lead, chromium, cyanide, and PCB concentrations were all below detectable limits, while TOC, phenol, COD, and oil and grease and total suspended solids were all well below maximum permitted discharge levels. The GC/MS scan of the initial sample revealed low levels of methylene chloride, chloroform, trichloroethene, tetrachloroethene and toluene ranging from 0.59 ppb to 20 ppb. Only methylene chloride (5.3 ppb) was detected in the latter sample. Complete separator sample analyses are listed in Appendix C.

8.5 Hudson River:

The TAT sampled the Hudson River shoreline water and sediment and the site underground drainage line to obtain preliminary data on potential river contamination from site drainage. Both inorganic and organic chemical analysis were conducted through the EPA Contract Laboratory Program.

All samples contained relatively low levels of heavy metals and phenols. Petroleum hydrocarbon contamination of the sediments was excessive, however, with values of 4,640 and 3,880 mg/kg being measured. Coal tar associated compounds, including naphthalenes and phenanthrenes, were also detected in the sediment. Values ranged from 3.7 to 21.0 ppm.

8.6 Summary:

Analyses of soil and subsurface water showed a consistent pattern of contamination. Predominant compounds included coal tar associated compounds, as well as other organics, including anthracene, napthalene, fluorene, benzene, toluene, methylene chloride, phenolics, 1,1,1-trichloroethane, and trichloroethene. Metal contamination was low. The analyses, coupled with visual observations, indicated probable widespread subsurface contamination, much of which might be the result of previous coal tar processing operations.

Yard water discharge quality, however, indicated only minimal contamination. Separator discharge values for all NJPDES regulated parameters were less than maximum permitted levels.

9.0 Waste Profile and Tank Integrity Studies:

9.1. Waste Profile Studies:

The importance of accurate tank content measurements for planning and conducting the removal action was previously discussed. Techniques needed to be developed which would give quick and accurate waste phase measurements since long term monitoring would be required.

The total volume in each of the tanks was easily calculable from the tank's height, diameter, and the distance from the top of the tank to the top of the liquid. Each tank, however, contained oily aqueous, semi-solid, and solid materials in varying proportions. Accurate estimates of these individual phase volumes were less easily obtainable.

Radar and sonar reflection, bouyancy, electrical conductivity, sonic conductivity, piezometry, condensation bands, infrared absorbance, and chromohygroscopism techniques were all considered.

Infrared Absorption:

Considered primarily to differentiate between aqueous and solids. Solids are usually a deposit of particles with water filling the interstices. Its conductivity is, therefore, much like that of water. The existence of the many particle/liquid interfaces prohibits linear transmission of infrared radiation. An infrared probe consists of a source/sensor couplet. When it is lowered into the sludge, the infrared light is scattered by the particles in the solids phase. The probe yields a similar reading when it passes from clear water into black oil.

Radar and Sonar:

When a wave propagating through a medium meets an interface with another medium, a portion of the wave is reflected back toward its origin. Radar and sonar can, therefore, measure the thickness of an oil layer resting on water. The water layer, however, is completely opaque to radio waves, rendering radar useless for detecting a sludge, solid, or chlorinated hydrocarbon layer under the water. Sonar will penetrate water layers, but its effectiveness in large scale operations is suspect.

Bouyancy:

An aluminum bob that has a mass of 440 grams in air will balance a 28 gram weight when it is immersed in kerosene and 25.2 grams when it is in water. When the weight sits on a solid, no weight is apparent on the scale at all. In a tank, depths would be measured by monitoring the length of string from which the bob hangs.

Direct Sampling:

One can use a direct sampler, such as a Bacon Bomb, to take a sample of the material at various depths in the tank. While this method is very tedious, rather messy, and very slow, there is little doubt about the information it yields. The methods tested during this study were compared to direct samples as a standard.

Chromohygroscopism:

A chromohygroscopic material (e.g. water paste) changes color when in contact with water. The material is applied to a tape or line which is then lowered into the tank until the weight on the tape no longer sinks. When the tape is removed, the water height is apparent from the location of the color change. The length of tape that is wetted, but shows no color change, is the height of the oil phase. The height of the tank, minus the length of string payed out equals the height of the sludge layer.

Condensation Patterns:

When relative humidity is high and air temperature rises sharply, water vapor condensing briefly on the tank walls can form a useful pattern. The condensation forms preferentially on the areas of the tank which are in contact with the relatively cold water. The liquid area above the condensation line is attributed to oil, and the area below is attributed to sludge. Although opportunities to utilize this phenomenon were rather limited, the information did confirm other measurements.

Based on the inherent problems in this application, only the equipment listed below was finally considered for this project.

I. Markland Sludge Gun Model 10

The Markland Sludge Gun works on the basis of infrared light absorbancy. High intensity infrared light is transmitted across a gap in the probe when the trigger is depressed. If the probe is suspended in a transparent liquid, the alarm on the gun remains silent. When the probe encounters a fluid with suspended solids sufficient to render the liquid opaque, the alarm begins to sound because the infrared light is being absorbed by the suspended solids. The volume and intensity of the alarm increases as the amount of suspended solids increases. There is an alarm sensitivity adjustment located on the handle of the gun which can be adjusted to determine slight differences in layers.

The Sludge Gun was easy to operate and appeared to be the ideal instrument for determining aqueous and solids layering. Where large volumes of aqueous are involved, and the sludge and/or solid layer cannot be determined visually, the instrument appeared to be fairly accurate. The sensitivity control allowed one to differentiate a thin light solids layer from thick solids in a single tank.

However, when there was an oil layer on top of the aqueous layer, or a solids layer below the aqueous layer, the oil or solids particles would adhere to the photo cell or L.E.D. This caused the instrument alarm to sound even in a transparent layer, leading to grossly inaccurate readings. This problem was minimized by placing a piece of cloth or paper towel loosely in the gap of the probe until it was lowered below the oil layer, where it was then shaken loose in the transparent layer.

The Sludge Gun often indicated sludge several feet before the probe came to rest on the bottom. The first indication was called "optical sludge," and the latter "physical sludge".

The Sludge Gun required a layer of relatively clear aqueous in the tank to yield a useful measurement. If the aqueous was too murky to permit the passage of infrared radiation, or if there was no aqueous layer at all, then the siren sounded continuously, whether in oil, aqueous or sludge. When this occured, no useful measurements could be taken. These conditions were present in the "C" tank farm (see Table 10).

The 75 foot-long cable on the Sludge Gun was marked with colored tape every six inches. The glue holding these numbers on the cable became loosened by the oil and had to be replaced more than once a month during the project.

II. Sonic Interface Probe Model MOD-B-2220-3

The sonic interface probe works on the basis of conductivity. When the probe enters a substance with low conductivity, such as oil, it sounds a steady unchanging alarm. When the probe enters a substance with high conductivity, such as water, it sounds a broken (or beeping) alarm. The beeping alarm appears to beep faster as it enters a purer (less oily) water layer. This aspect may allow an experienced operator to determine oil/water emulsion layers.

This instrument provided reasonably accurate results in locating the oil and aqueous layers, as well as determining the oil/aqueous emulsion layer. The probe would often indicate oil at greater depths while descending through the tank than while ascending. We attributed this either to contamination of the probe forks by oil in the upper layers or to the probe "carrying" some water with it up through the oil. The former effect was reduced by shaking the probe up and down in the water to remove the oil. The latter was reduced by moving the probe very slowly up through the oil.

The solids layer was determined by dropping the probe until it would not drop any further. Since the sonic probe was heavier than the infrared probe this level was sometimes one or two inches below that found with the infrared probe. The Sonic Interface Probe continued to "beep" while in the sludge. Since water is the continuous phase in most sludge, this was as expected.

The cable of the Sonic Interface Probe was more sturdily constructed. It consisted of a plastic measuring tape with wire along each edge. This package was encased in a PTFE polymer coating that made it easy to clean. The probe consisted of two metal rods in a metal cylinder. The rods were the transmitter/receiver pair for both measurement modes (sonic and electrical).

III. "Buoyimeter" Scale with Known Weight Attachment

The "Buoyimeter" was developed on this particular project. It consisted of an electronic scale with an object of known weight attached through the bottom of the scale using nylon line. The attachment through which the nylon string passes is connected to the actual measuring device within the scale. One end of the nylon string is attached to the object of known weight. The string then passes through the attachment, connected to the measuring device, to a spool used to lower and raise the weight through the different layers. The instrument worked on the basis of density. When the weight passed into a liquid of low density, such as oil, the electronic readout would indicate the object weighing more than it would in a more dense liquid, such as water. When the weight reached a physical solids layer, the electronic readout would read zero.

The bouyimeter was originally hand held. Phase layering could not be determined in this configuration because the amount of error added by hand movements exceeded the changes expected from bouyancy differences. A frame for the bouyimeter was constructed which greatly reduced this source of error. However, some of the oil on the site was viscous enough to cause a hysteresis in the reading on the scale. Ascending through the oil placed over 300 grams of weight on the scale. Descending placed less than 10 grams. It took over one minute for the reading to stabilize at some points in the tanks. This made this technique too slow for our purposes.

IV. Bacon Bomb Sampler

The Bacon Bomb sampler is a stainless steel chamber available in different volumes. A hole in the bottom of the chamber is sealed by a steel plunger, which runs through the chamber and out the top, where it is connected to a line or wire. The bomb is lowered into the liquid down to the desired level by use of another line connected to the sampler itself (not the plunger). When the desired level is reached, the string connected to the plunger is pulled to raise the plunger up out of the hole in the bottom of the chamber. This allows the trapped air to escape and the chamber fills with liquid from that particular level. When the plunger is allowed to drop back into the hole, it traps the liquid in the chamber until it can be raised to the surface. Discrete sampling allowed a visual examination of the material, but was extremely tedious and time consuming since many samples had to be taken to determine phase boundaries. The samples taken by Bacon Bomb were used as a reference for standardization of the other methods. The sensitivity of this standard was limited since samples were taken at only one foot intervals.

V. Condensation Pattern

Condensation patterns were easy to inspect and measure, but changed rapidly and unpredictably.

Conclusions:

A comparison of the tank profile data developed using the various techniques is shown in Table 10. Both the Sludge Gun and the Sonic Interface Probe accurately detected the parameters they were designed to detect. Unfortunately, this did not mean that they yielded the same phase layer measurements.

When in an oil/aqueous emulsion, the Sonic Interface Probe weakly indicated the continuous phase, because that is the phase that conducts or does not conduct electricity. The Sludge Gun always indicated oil in an emulsion because of the number of interfaces the light must cross. The ability to yield a signal specific for an emulsion was an advantage of the Sonic Interface Probe.

The primary disadvantage of the Sonic Interface Probe was its inability to detect the watery sludge that the infrared detector was able to find. The primary disadvantage of the Sludge Gun was its inability to work in turbid aqueous or oil/solids layers. The measuring tape design of the Sonic Interface Probe cable made measurements much easier than with the Sludge Gun.

It was concluded that there was no best way for exactly determining phase layer boundaries in the oil storage tanks. Every device used gave a general description of the tank contents. The most accurate way to determine layering would be to use the Sludge Gun, Sonic Interface Probe, and the Bacon Bomb in conjunction with each other.

Finally, tanks should be measured from two different points as the solids layer may be sloped (deeper on one side of the tank versus the other side).

9.2. <u>TANK THICKNESS TESTING:</u>

Various tanks showed obvious external corrosion and these tank walls were measured with a Panametric Thickness Gauge to determine actual wall thickness. This data was necessary to formulate removal priorities from those tanks most likely to fail. These measurements yielded significant data for planning or confirming waste removal priorities from the site. The collected data is tabulated in Table 11.

The measurements revealed bottom corrosion at the tank foundations on Tanks A-4, A-7, D-12 and D-14. The bottom edge of Tank A-5 was also corroded; in addition the top panel had also corroded through. A similar pattern was evident on Tanks D-15 and D-13. Reinforcing plates had been welded on the bottom of D-13, presumably to reinforce a failing tank bottom. Finally, severe corrosion was evident on the face of Tank D-8 where wall thicknesses less then 50% of original were measured. The extreme deterioration of this tank was confirmed in November when additional measurements indicated up to 80% corrosion in discrete areas of the tank.

9.3. Tank Tilt Measurements:

Tank tilt measurements were undertaken due to the extreme tilting of some tanks and to provide baseline information against which future tank movements could be measured.

Two methods were utilized - a contractor's protractor or a plumb line. The protractor was placed against the tank wall and the degree(s) tilt was measured directly. The device was simple and easy to use and gave reasonably reliable results. In addition, measurements could be taken safely from the ground by only one person. Finding a satisfactory measuring point on the rough tank walls was often difficult and was the major disadvantage of this method. Also it was difficult to accurately read the protractor, since degree of tilt was often small.

When the plumb line was used, one person had to hold the line against the top edge of the tank. A second person then measured the distance from the bottom of the tank to the plumb bob. This method gave accurate measurements, but required two people, one of which had to climb to the top of a deteriorated tank. Tank tilt data are listed in Table 12.

10.0 PROJECT EVALUATION:

10.1. Effectiveness of Removal Action:

The development of the site mitigation workplan provided a framework for planning, evaluating, and revising work tasks and budgets throughout the course of the removal action. This was a valuable tool in managing day-to-day operations as well as in communicating EPA strategies and objectives to PRPs and the ERCS contractor.

This action included several innovative strategies and work tasks including:

- Evaluation and development of waste phase measuring instrumentation for use in bulk storage tanks.

- Construction and installation of semi-permanent bulk storage tank roofs and covers.

- A successful program of waste treatment/destruction was carried out rather than landfilling, restaging or securing wastes for later removal. More than 99% of the 2,449,974 gallons of wastes removed was treated and destroyed as a waste. Less than 1% was landfilled.

- PRP negotiations were conducted to encourage future recycling of coal tar materials and treatment/processing of solids and oils for use as a fuel source in approved industrial boilers. This policy would maximize legal utilization of the materials and minimize landfilling as a disposal alternative.

- Extensive waste inventory and removal recordkeeping and documentation with a pilot on-site computer support program.

A total of 2,449,974 gallons of waste was removed and extensive construction activities (i.e., aerial and ground piping removal, tank roof and cover installation, railroad track repair, and oil/water separator renovation) were conducted without major injuries, exposures to hazardous wastes or other major mishaps. The ERCS personnel, had to continually adapt to non-routine tasks and performed well considering their lack of experience in some areas.

The cost per gallon of hazardous waste removed was $0.63 ($0.91/gal. for only wastes shipped and disposed off site). This indicates a generally efficient, cost-effective operation, especially in view of the amount of work necessary to prepare for large scale removals and other tasks necessary for the long term stability of the site or for safety considerations.

Communications with contractors, public officials, the media and PRPs were all enhanced by the daily presence of the OSC. This personal visibility substantiated the agency's serious intention to complete the entire site cleanup and improved the agency's credibility, thereby, contributing to the ultimate resolution of a PRP takeover of the removal program.

10.2. Problems Encountered:

Multiple activities requiring on site monitoring, i.e., waste hauling vehicle inspection and loading, personnel and equipment entry and exits, tank contents monitoring, and construction activities were often conducted concurrently. This made it difficult for the OSC and two TAT personnel to actively oversee all operations at all times.

Site management documentation forms i.e., entry and exit logs and Incident Obligation Records were not designed for removal actions of this size and duration and were often inadequate for reporting the documentation required.

Many of the on-site ERCS personnel were unfamiliar with the types of work tasks required on site. Most adapted after a period of orientation and training. However, the high turnover rate of both skilled and unskilled ERCS personnel was a major contractor problem. Orienting replacement response managers and foremen meant increased downtime and loss of production. Replacing cleanup technicians reduced team effectiveness and increased the potential for accidents and injuries. While injuries were few, several instances of equipment failure or accidents on site could be attributed to inexperienced replacement personnel. This also contributed to administrative delays and contractor reporting errors.

Specialized ERCS support functions were the most disappointing. Professional engineering and materials sampling and analysis support required continual EPA/TAT oversight to insure quality products.

The ERCS tool and equipment inventory was also inadequate and less than required under contract. This necessitated searching for local vendors to make initial purchases which forced delays and reduced work effectiveness. These unseen costs became increasingly significant due to the duration of the action.

Planning and carrying out much of the material removals were extremely difficult. Characterization of the solids layer(s) in many of the tanks was impossible due to the overlying layers. Therefore, potential disposal alternatives and associated costs could not be accurately projected. Also, suitable and reasonably priced facilities which could accept ignitable or PCB >50 ppm contaminated oils could not be readily found. Finally, the facility's notorious reputation may have dissuaded some potential purveyors from getting involved with the cleanup operations.

Finally, the uncertainty of the PRP takeover timetable meant postponing capital construction necessary for railcar transport. This resulted in a longer period of higher waste transportation and treatment costs.

10.3. Recommendations:

The public and PRP perception of EPA concern and involvement was often correlated to the involvement and visibility of the OSC. It is crucial that OSC's be given the opportunity to best represent the agency on site as however justified by each removal situation. Personal professional relationships were a key to developing and maintaining communications and contributed much to the success of the action.

The high ERCS personnel turnover, as discussed, was a major problem. Continual orientation and training was required. This continual work and safety procedure reviews reduced the negative impact of the high turnover and greatly contributed to the excellent safety record. ERCS hiring of a specialized consultant, who remained on site, also reduced the turnover impact. ERCS also subsequently utilized personnel who were willing to stay longer than the three week turnover time allowed by the ERCS contractor policy.

The ERCS use of computerized Contractor Cost Reports (1900-55) greatly aided review and evaluation. Arithmetic errors were greatly reduced, format standardized, submission time improved, and review time reduced. Likewise, the pilot TAT computer support program proved to be a valuable cost-effective support on a complex, large scale removal such as this. Contractor computer support capabilities should continue to be upgraded.

11.0 FINAL FINANCIAL REPORT

Total Extramural Trust Funds Authorized for Mitigation Contracts	$ 5,691,500
Expenditures for Mitigation	
1. Amount obligated and expended under contract #68-01-6893, DCN #KCS 453	200,000
2. Amount obligated and expended under contract #68-01-6893, DCN #KCS 460	240,000
3. Amount obligated and expended under contract #68-01-6893, DCN #KCS 469	88,000
4. Amount obligated and expended under contract #69-01-6893, DCN #KCS 476	517,500
5. Amount obligated under contract #68-01-6893, DCN #KCS 498	360,000
a. Amount expended under contract #68-01-6893, DCN #KCS 498 through 11/27/85	325,593
b. Balance of unobligated funds under contract #68-01-6893, DCN #KCS 498	34,407
Balance of unobligated authorized funding through 11/27/85	34,407
Estimated total expenditures through 11/27/85	1,371,093
Estimated TAT costs through 11/27/85	151,557
Estimated EPA costs through 11/27/85	35,500
Total estimated expenditures through 11/27/85	$ 1,594,693
Percentage of $5,691,500	28.0%

- See Figure 5 for monthly expenditures
- Estimated costs through 9/26/85 (ERCS demobilization date) $ 1,556,969

FROLA/VON DOHLN TANK FARM
TANK CONTENTS SUMMARY (WATER)
STABLEX - REUTTER INC. NOVEMBER 1983

Tank	Amount Gallons	PCB ppb	Oil & Grease ppm	COD ppm	BOD ppm	TOC ppm	TSS ppm	Cr ppm	Ba ppm	Pb ppm	CN ppm	pH
A-1	195.000	14.0	500.0	23 000	2,200	8,000	3 600	0.88	1.1	8.7	10.0	5.86
A-2	38.000	46.0	500.0	5,700	200	19,000	2.000	0.05	0.43	0.64	4.3	6.23
A-3	317,000	1.0	38.0	280	7.2	38	120	0.05	0.01	0.01	2.0	7.07
A-4	25,000	1.0	7.0	530	140	160	140	0.02	0.1	0.1	4.0	5.40
A-6	98,000	1.0	580.0	35,000	2	8 800	1 200	0.25	0.84	1.9	8.0	5.47
A-7	510.000	1.0	140.0	4,400	1	1.000	370	0.08	0.14	0.21	2.0	5.76
B-4	6,200	7.2	160.0	22,000	4,100	7 000	980	0.26	1.6	12.0	2.6	5.17
B-5	27,000	6.3	36.0	20,000	4,800	6.800	1,600	0.13	2.8	6.1	5.0	7.10
B-9	2,700	11.0	51.0	21,000	7 600	8.000	620	0.17	1.4	12.0	8.0	5.31
C-5	7,800	1.0	40.0	2,100	860	1,000	520	0.06	0.1	0.91	1.2	6.75
C-7	7,900	27.0	67.0	33,000	1,500	12,000	1,500	0.29	0.42	6.0	8.4	5.45
C-9	7.900	92.0	140.0	87,000	14,000	19,000	1,900	0.26	2.30	2.6	1.0	6.55
C-10	21 000	7.5	200.0	31,000	3.000	6,500	1,500	0.25	0.23	3.3	9.3	5.72
C-11	22.000	5.8	38.0	5.200	3.400	2,300	630	0.09	0.1	0.71	4.9	5.96
D-3	6,900	13.0	150.0	28,000	11,000	10,000	400	0.26	0.7	4.0	10.0	5.99
D-4	4,900	11.0	360.0	150,000	20,000	54,000	1,110	6.80	0.65	59.0	5.4	6.89
D-5	2,700	1.0	180.0	12,000	4,600	3 800	2,600	0.12	0.40	0.37	4.5	7.17
D-7	1,100	1.0	97.0	760	130	310	3,200	0.05	0.04	0.05	2.5	3.95
D-8	22,300	1.0	260.0	1,700	5.7	730	120	0.05	0.1	0.05	2.0	6.19
D-9	6,700	10.0	230.0	70,000	-	12,000	-	0.42	0.1	0.62	1.6	N/A
D-10	640,000	-	-	-	-	-	-	-	-	-	-	-
D-11	510,000	21.0	650.0	17 000	7,900	6,900	12,000	0.41	1.90	5.60	9.8	5.46
D-12	800	1.0	38.0	710	550	470	790	0.05	0.19	0.14	2.4	6.37
D-13	6,600	1.0	540.0	3,600	2 100	2,000	490	0.10	0.59	0.21	3.5	6.34
D-14	91 000	1.0	170.0	360	340	220	480	0.05	0.1	0.1	1.7	7.18
SUM	2,578,500											
Average Conc. (vol. weighted)		8.6	323.6	11,935	3.184	4,309	3,852	0.27	0.78	2.90	5.44	

WESTON DESIGNERS CONSULTANTS — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Table 1
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Brzozowski	Tank Contents Summary (Water)

TABLE 2

FROLA/VON DOHLN TANK FARM
TANK CONTENTS SUMMARY (NON-PCB OIL)
STABLEX-REUTTER INC. NOVEMBER, 1983

Tank	Volume Gallons	Solids %	Water %	BTU/Per Pound	Flash Pt. °F	Ash %	Sulfur %	Halogens ppm	PCBs ppm
A-1	20.000	25	5.4	19,000	163°	2.8	1.2	1,200	6.2
A-2	20,000	24	17.0	14,000	125°	1.0	1.5	1 100	9.5
A-6	124,000	58	1.6	20,000	147°	0.75	0.85	910	<5
B-4	1,900	65	5.0	19,000	180+	0.44	4.6	640	<5
B-5	1,900	49	<0.2	20,000	180+	16.0	3.0	420	12
B-10	5,500	61	19	15,000	142	2.9	2.0	590	16
B-11	5,100	22	1.6	19,000	143	0 47	2.7	540	16
B-12	2.500	25	3.0	19,000	180+	0.52	1.2	300	19
C-5	1 300	21	4.8	20 000	180+	0.58	2.9	350	26
C-6	-	20	0.2	19,000	156	0.58	2.3	590	29
C-8	1,000	46	0.6	9,000	180+	0.29	2.8	260	<5
C-9	17,000	52	<0.2	18,000	180+	0.50	0.83	1,110	13
C-10	1 000	59	12	17.000	180+	0.83	2.1	160	<5.0
D-1	6,000	45	16	19,000	180+	1.4	3.0	500	<5.0
D-2	8,900	0.15	<0.2	20.000	180+	<0.1	0.16	<5.0	<5.0
D-3	-	66	<0.2	18 000	180+	0.42	1.0	470	<5.0
D-4	-	57	<0.2	18,000	146	0.28	0.96	160	<5.0
D-5	-	38	3.4	18,000	180+	1.90	1.1	360	<5.0
D-6	2 600	21	2 4	16,000	180+	0.28	3.7	<5.0	<5.0
D-8	25,200	55	2.0	20,000	180+	0.21	0.63	160	<5.0
D-11	60,000	33	36	14,000	180+	5.4	4.9	1.200	<5.0
D-12	-	40	0.40	19,000	180+	0.25	1.75	620	<5.0
D-13	-	46	<0.2	18,000	180+	0.19	2.10	38	<5.0
D-14	-	3.9	8.8	18,000	168	0.12	3.60	130	<5.0
Sum	303,900	-	-	-	-	-	-	-	-
Average	-	44.8	10.2	18,021	-	1.87	1.85	958	4.18

WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM: J. Witkowski	Table 2
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM: J. Brzozowski	Tank Contents Summary (Non-PCB Oil)

TABLE 3

FROLA/VON DOHLN TANK FARM
TANK CONTENTS SUMMARY (PCB OIL)
STABLEX-REUTTER, INC. NOVEMBER, 1983

Tank	Volume Gallons	PCB ppm
B-3	-	60
B-7	-	150
B-9	-	74
C-1	102,000	99
C-2	13,200	73
C-3	-	41
C-4	102,000	70
C-7	17,000	250
D-9	18,000	64 (O.H. data-170 ppm)
Sum	252,200	
Average		101

Table 4

WORK TASK COST ESTIMATES

- Administration	$ 100,000
- On site mobilization	425,800
- Removal of physical obstructions	8,900
- Boom deployment/oil collection	31,500
- Repair of containment walls	4,700
- Upgrade spill containment	83,500
- Oil/water separator inspection	5,000
- Seal underground pipeline	5,300
- Decommission underground tanks	6,200
- Ambient and NJPDES monitoring	32,600
- Rail siding upgrading	11,800
- Waste analysis	50,400
- Waste removal operations	193,500
- Water disposal	868,900
- Non-PCB oil disposal	86,600
- PCB oil disposal	1,127,700
- Non-PCB sludge disposal	96,800
- PCB sludge disposal	186,200
TOTAL	$ 3,325,400

Tank Number	Water	Oil	Bottoms
A - 1	22,000	10,220	27,010
- 2	109,000	26,360	8,550
- 3	10,000	-	56,340
- 4	10,000	-	137,692
- 5	-	-	2,500
- 6	20,000	27,075	107,160
- 7	14,212	43,240	178,600
B - 1	-	-	-
- 2	-	-	-
- 3	200	200*	335
- 4	-	-	2,672
- 5	-	-	-
- 6	-	-	21,550
- 7	-	2,120*	2,660
- 8	-	-	720
- 9	-	780*	802
-10	-	7,140	700
-11	-	6,580	420
-12	-	2,500	-
C - 1	-	96,020*	9,280
- 2	-	20,030*	9,350
- 3	-	2,600	4,960
- 4	-	101,080*	4,540
- 5	-	-	762
- 6	-	2,600	2,160
- 7	9,400	16,300*	160
- 8	-	7,398	-
- 9	5,830	5,330	340
-10	25,048	-	-
-11	-	-	-
D - 1	-	4,500	-
- 2	-	1,800	-
- 3	4,320	300	2,220
- 4	-	840	6,300
- 5	-	-	2,419
- 6	-	-	430
- 7	-	-	6,040
- 8	-	87,330	282,828
- 9	-	20,110*	6,390
-10	46,000	25,560	221,520
-11	62,000	23,827	175,890
-12	2,400	200	3,440
-13	-	600	3,759
-14	-	17,298	18,360
-15	-	-	13,035
-16 thru 23	Not Used By Quanta, Contain Unknown Quantities of In Process Tar Products		
24	-	-	710
25	-	-	1,066
26	-	1,820	1,140
27	-	-	285
28			
29	3,000	-	1,000
30	6,800	-	1,000
TOTAL	350,210	561,758	1,327,095

* PCB > 50 PPM

WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Table 5
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Brzozowski	PRP Material Inventory, Nov. 1985

CRITERIA	A1	A2	A3	A4	A6	A7	B5	C10	C11	D8	D10	D11	D13	D14
Tank Volume Exceeds Yard Containment	X		X	X	X	X				X	X	X		
Chemical Hazards					X	X	X	X	X	X	X	X	X	X
Fire/Explosion Hazard		X			X	X								
Deteriorated Tank			X	X	X	X	X			X		X	X	X
Special Hazard Due to Spill Path	X	X	X		X	X					X	X	X	X
Potential Overtopping of Containment	X	X			X	X				X	X	X		X
Tank Overtopping Potential				X		X				X				X
Deteriorated Roof			X	X		X				X	X	X	X	X
Operational Safety	X	X	X	X		X	X			X	X	X	X	X
Bulk Storage Transfer Use						X		X	X					

WESTON DESIGNERS CONSULTANTS — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Table 6	
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Waste Removal Systems Analysis	

The D. C. Talbot Gauge & Calibrating Company

371d6d
Inage

Telephone:(312)695-3840 Elgin, Illinois 60120

For: COASTAL TANK LINES, INC. Date: Jan 10, 1978

Unit No.: 371d6d Serial No.: UNV577808 Dry lines

Page 1 of 1

1/4 INCH INAGE CHART IN GALLONS TO ONE GALLON

Single Compartment

INCH	-0-	1/4	1/2	3/4
1	27	34	42	50
2	60	70	82	94
3	106	119	133	147
4	162	177	193	209
5	226	243	261	279
6	298	317	336	355
7	375	396	417	438
8	459	481	504	526
9	550	573	597	622
10	646	671	696	721
11	747	772	798	824
12	850	877	903	930
13	957	984	1,011	1,039
14	1,066	1,094	1,123	1,151
15	1,180	1,209	1,238	1,267
16	1,297	1,327	1,357	1,387
17	1,417	1,447	1,478	1,508
18	1,539	1,570	1,601	1,632
19	1,663	1,695	1,727	1,758
20	1,790	1,822	1,854	1,887
21	1,919	1,952	1,984	2,017
22	2,050	2,083	2,116	2,149
23	2,183	2,216	2,250	2,283
24	2,317	2,351	2,384	2,418
25	2,452	2,486	2,520	2,554
26	2,589	2,623	2,657	2,691
27	2,726	2,760	2,795	2,829
28	2,864	2,898	2,933	2,968
29	3,003	3,038	3,073	3,108
30	3,143	3,178	3,213	3,248
31	3,283	3,319	3,354	3,389
32	3,425	3,460	3,496	3,531
33	3,567	3,602	3,638	3,674
34	3,709	3,745	3,781	3,817
35	3,852	3,888	3,924	3,960
36	3,996	4,032	4,068	4,103
37	4,139	4,175	4,211	4,247
38	4,283	4,319	4,354	4,390
39	4,426	4,462	4,497	4,533
40	4,568	4,603	4,638	4,674
41	4,709	4,744	4,779	4,814
42	4,849	4,884	4,918	4,953
43	4,988	5,022	5,057	5,091
44	5,126	5,160	5,194	5,228
45	5,262	5,297	5,330	5,364
46	5,398	5,432	5,465	5,499
47	5,532	5,565	5,599	5,632
48	5,664	5,697	5,730	5,762
49	5,795	5,827	5,859	5,891
50	5,923	5,954	5,986	6,017
51	6,048	6,079	6,110	6,141
52	6,171	6,202	6,232	6,262
53	6,292	6,322	6,352	6,381
54	6,411	6,440	6,469	6,498
55	6,527	6,556	6,584	6,612
56	6,641	6,669	6,697	6,724
57	6,752	6,779	6,807	6,834
58	6,861	6,887	6,914	6,940
59	6,965	6,991	7,016	7,041
60	7,065	7,089	7,113	7,137
61	7,160	7,183	7,205	7,228
62	7,250	7,272	7,293	7,314
63	7,335	7,356	7,376	7,396
64	7,416	7,436	7,454	7,472
65	7,490	7,507	7,523	7,539
66	7,555	7,569	7,583	7,596
67	7,609	7,621	7,632	7,643

STRIKE POINT (at rear, center of dome): 73 --- Inches

SHELL FULL CAPACITY: 7,695 gallons

Calibrating engineer

WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. WITKOWSKI	Table 7
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. MANFREDA	TANK TRUCK CALIBRATION CHART

Aqueous Removal Summary
"Over-The-Top" Pumping
Tank Trucks To
Waste Conversion

Tank Number	Number of Trucks	Volume (gal.)
A-4	1	4,710
A-6	0	1,125
B-9	1	3,350
C-8	1	5,108
C-10	5	28,118
C-11	4	20,381
D-5	1	4,061
D-10	40	221,923
D-11	2	10,371
D-13	5	25,000
D-14	16	92,160
D-15	9	45,757
T-1	0	1,122
Total	85	463,186

WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Table 8
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Aqueous Removal "Over-The-Top

Aqueous Removal Summary
Valves Or Side Ports
Tank Trucks To Waste Conversion

Tank Number	Number of Trucks	Volume (gal.)
A-1	10	52,294
A-2	4	19,942
A-3	2	9,988
A-7	34	172,889
B-3	0	1.600
B-4	1	6,096
B-5	5	24,480
C-5	1	3,028
D-8	16	82,762
D-10	3	17,895
D-11	16	80,094
D-29	0	1,380
D-30	1	2,920
Total	93	475,368

COMPARISON OF TANK PROFILING METHODOLOGIES

TANK	METHOD	INTERFACE HEIGHT IN FEET AND INCHES AIR/LIQUID	OIL/WATER	WATER/SLUDGE
A-1	Infrared	24' Ø"	23'	22'
	Sonic	24' Ø"	22' 1Ø"	-
A-2	Infrared	Could not use.	No clear water layer.	
	Sonic	7' 5"	6' 5"	6"
A-3	Infrared	18' 1Ø"	None	2' 8"
	Condensation	15' Ø"	None	None
A-4	Infrared	14' 3"	None	3' 1Ø"
	Sonic	14' 3"	None	3' 6"
	Condensation	14' Ø"	None	None
A-6	Plumb Bob	5' 6"	None	4' 3"
	Sonic	Could not use.	No water layer.	-
	Infrared	Could not use.	No water layer.	-
A-7	Infrared	22' 11"	20'	6' 6"
	Sonic	22' 11"	19' 9"	None
B-1 - B-6		Only one method per tank.		
B-7	Infrared	2' 3"	None	1' 3"
	Sonic	2' 3"	None	1' 3"
B-9	Infrared	6' 5"	5' 6"	1' 9"
	Sonic	6' 6"	5' 8"	1' 11"
B-10	Infrared	9' 4"	None	7"
	Sonic	9' 4"	None	6"
B-11	Infrared	8' 4"	None	9"
	Sonic	8' 4"	None	6"
C-1	Infrared	41' 11"	5' 9"	3' 8"
	Sonic	41' 11"	5' 3"	3' 2"
C-2	Infrared	Could not use.	No clear water layer.	
	Sonic	11' 4"	None	2' 1Ø"
C-3	Infrared	Could not use.	No clear water layer.	
	Sonic	2' 11"	None	1' 11"

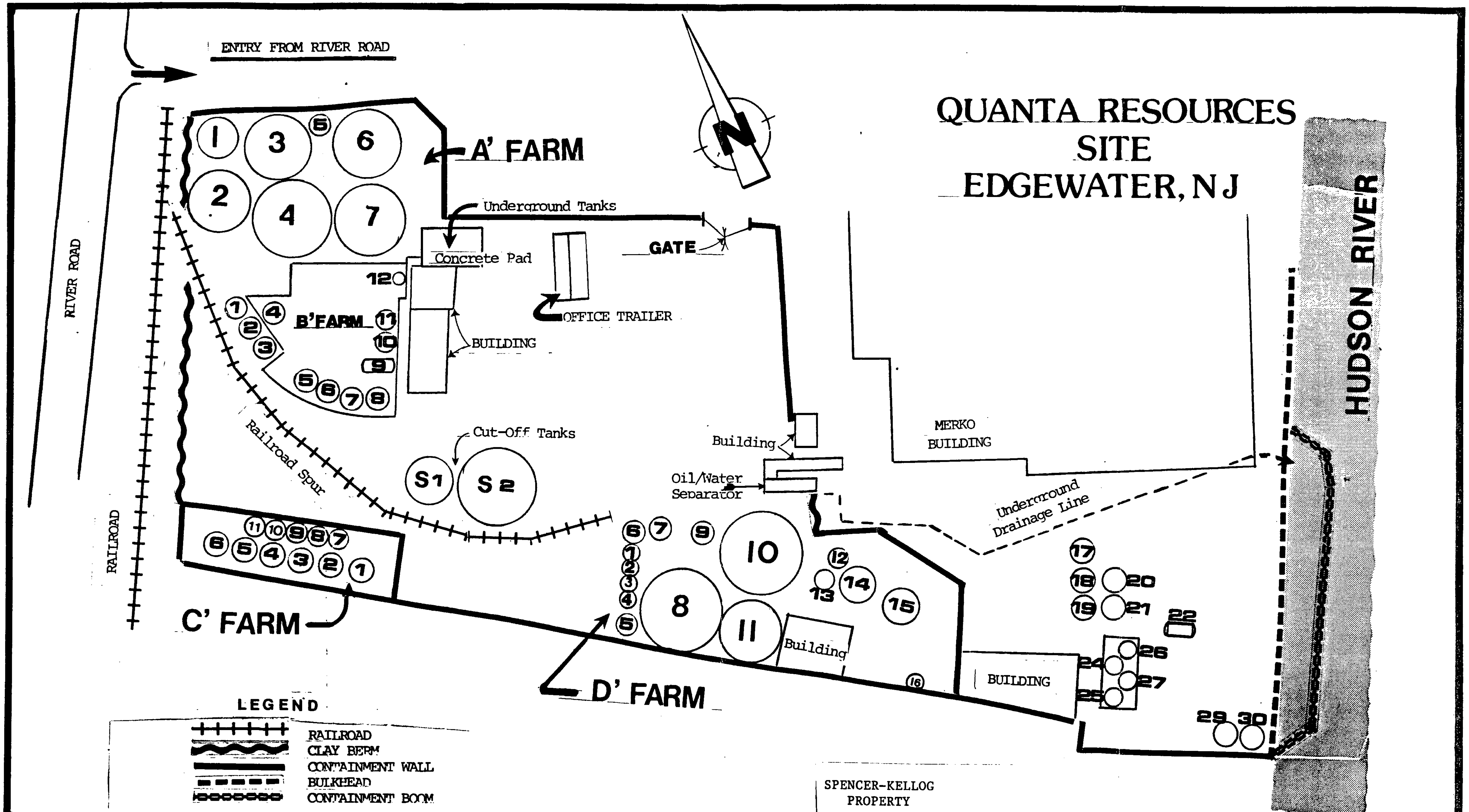
Tank	Thickness		Remarks
A- 4	Panel #1	0.584	Corrosion at tank bottom evident
	#2	0.475	
	#3	0.410	
A- 5		0.240	Tank walls thin, severe corrosion at bottom. Top panels corroded through
A- 7	N	- 0.686	Corrosion seen at bottom edge
	E	- 0.674	
	S	- 0.656	
D- 8	NE	- 0.346	Severe corrosion on east face - thickness <50% of original
	E	- 0.287	
	NW	- 0.609	
D-12	Bottom	- 0.246	
	Top	- 0.198	
D-13	Bottom	- 0.255	Reinforcing plate welded around 1/4 bottom panel due to corrosion. Top panels corroded through.
	Top	- 0.250	
D-14	Bottom	- 0.315	Extensive corrosion at bottom by foundation.
	Top	- 0.332	
D-15	Bottom	- 0.303	Severe corrosion at bottom. Top panels corroded through at several points.
	Top	- 0.271	

D-12, 13, 14, 15 measurements taken on 6/20/85

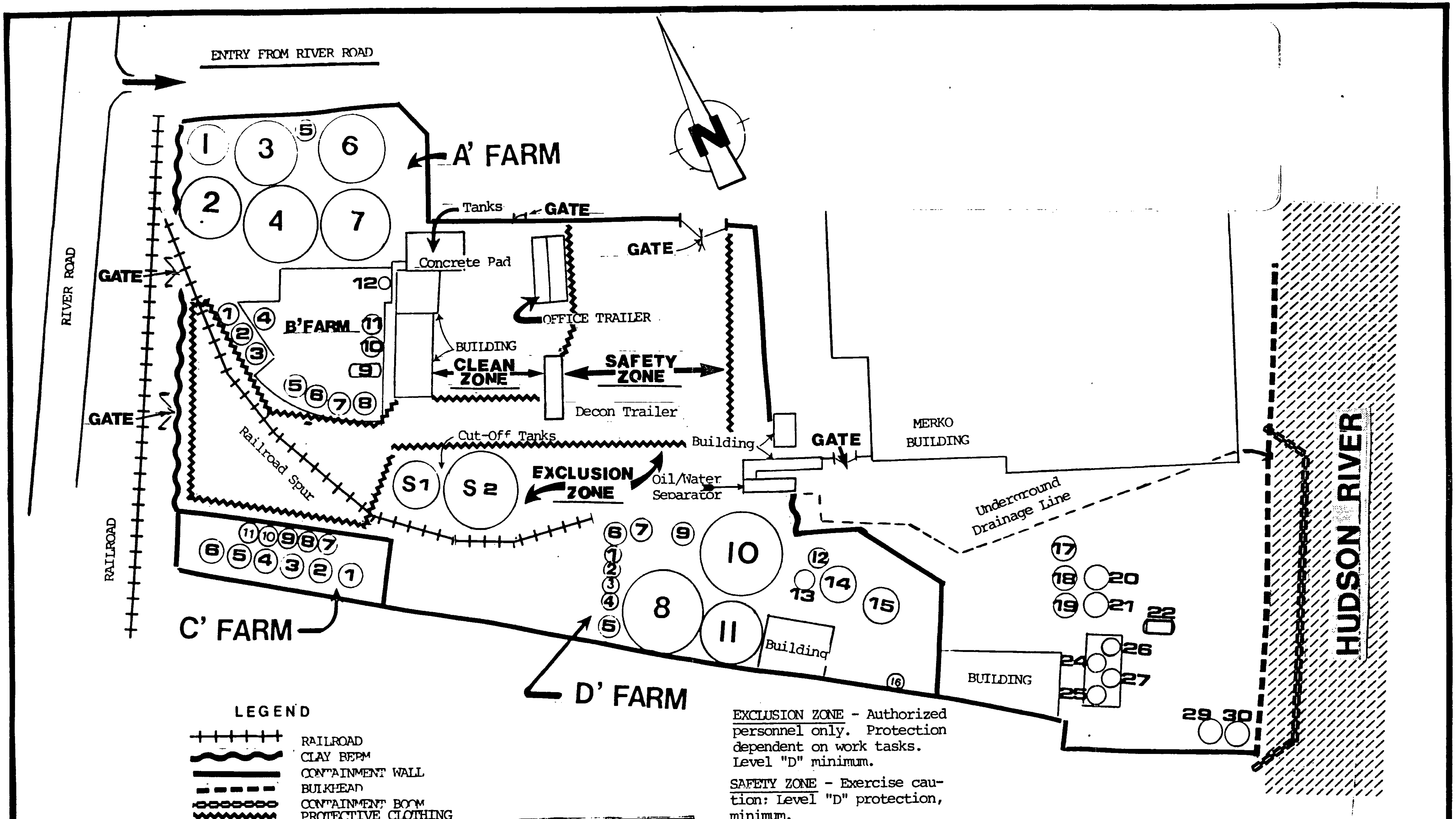
WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Table 11
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Tank Thickness Measurements

Tank#	Height	Face	Date 4/24/85		Date 6/6/85	
			°Tilt	Inches Offset	°Tilt	Inches Offset
B-5	18'	S	1.0°	4.3"	1.0°	4.3"
B-6	17'-4"	N	-	-	1.0°	3.5"
D-5	20'-6"	SW			3.0°	12.9"
		E	2.0	8.6"	-	-
D-6	20'-6"	E	0.5"	2.2"	1.0°	4.3"
		S	-	-	1.5°	6.4"
		E	2.0	8.6"	-	-
D-7	20'-6"	NE	1.0	4.3"	1.0°	4.3"
		SW	1.0	4.3"	1.0°	4.3"
D-13	24'	E	0.5	2.5"	0.5	2.5"
D-14	29'	E	0.5	3"	0.5	3"
D-15	29'	SW	2.0	12"	2.0°	12"
		NE	1.0	6"	0.5°	3"
D-21	12'	N	-	-	3.0°	8.6"
		E	2.0	12.5"	2.0°	12"
D-29	29'-8"	N	3.5	21.8"	3.5°	21.8"
		W	0.5	3"	0.5°	3"
D-30	29'-8"	W	-	-	2.0	12"

WESTON	SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 1
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.		TAT PM J. Manfreda	Site Location



WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J WITKOWSKI	FIGURE 2
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J MANFREDA	SITE PLAN



WESTON

SPILL PREVENTION & EMERGENCY RESPONSE DIVISION

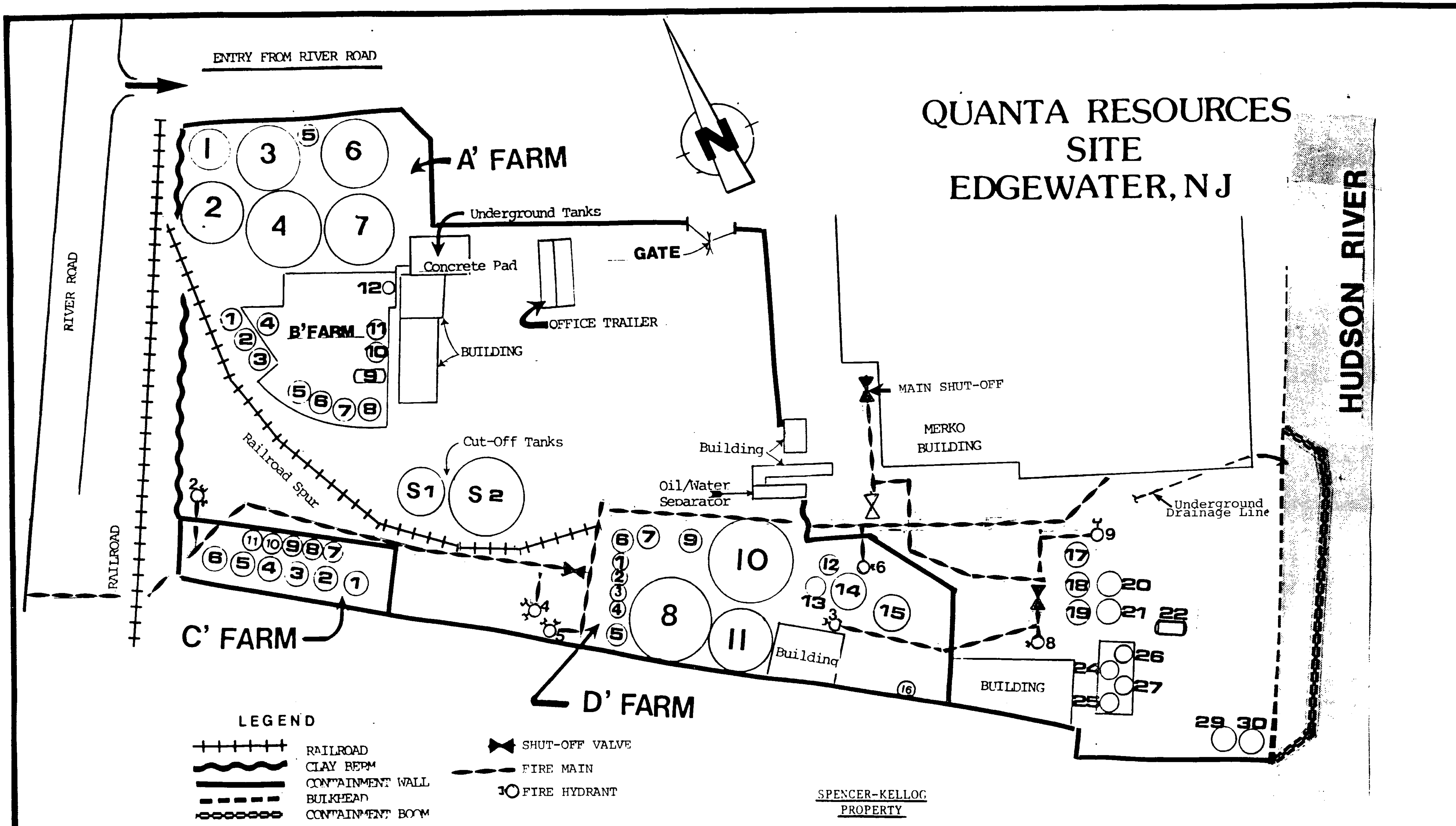
FIGURE 2A

QUANTA RESOURCES SITE EDGEWATER, NJ

EXCLUSION ZONE - Authorized personnel only. Protection dependent on work tasks. Level "D" minimum.

SAFETY ZONE - Exercise caution: Level "D" protection, minimum.

CLEAN ZONE - No contaminated clothing, equipment, materials; minimum protection required.



WESTON

SPILL PREVENTION & EMERGENCY RESPONSE DIVISION

In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc

EPA PM J WITKOWSKI

TAT PM J MANFREDA

FIGURE 3

FIRE MAP

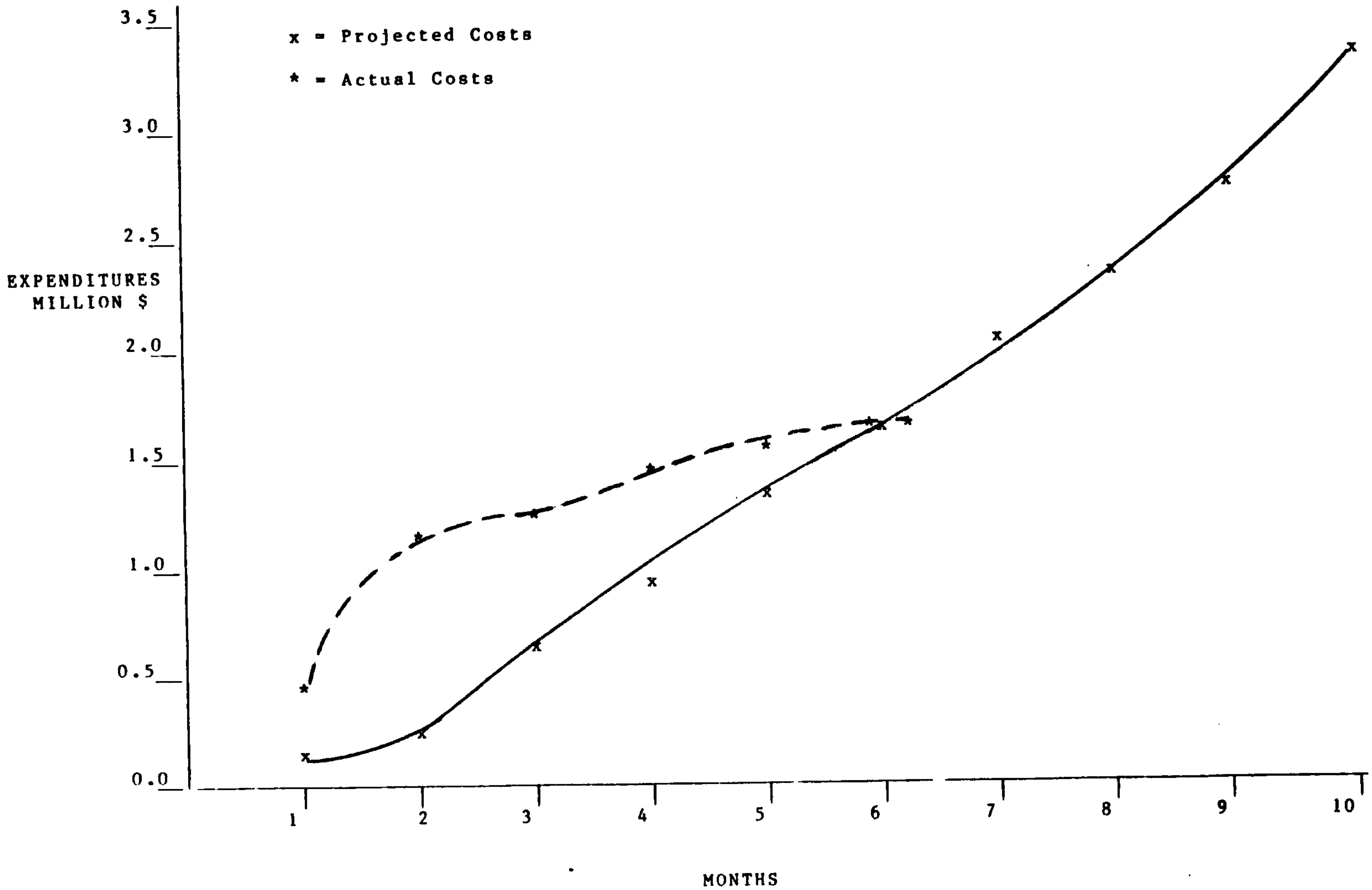
PROPOSED PROJECT TIMETABLE

	MONTH 0	1	2	3	4	5	6	7-10
Project Administration	**********	**********	**********	**********	**********	**********	**********	**********
On Site Mobilization	**** *****	**********	**********	**********	**********	**********	**********	**********
Removal of Physical Obstructions	***							
Boom Deployment/Oil Collection	*** ***	**********	**********	**********	**********	**********	**********	**********
Repair Containment Walls		***						
Upgrade Containment(if necessary)								***
Oil/Water Separator Repair	***							
Seal Underground Pipeline		***						
Decommission Underground Tanks			***					
NJPDES/River Sampling		**						**
Air Monitoring	** **	**********	**********	**********	**********	**********	**********	**********
Soil Sampling	**							**
Groundwater Monitoring	**							**
Liquid Waste Sampling	***							
Sludge Sampling		**				**		
Rail Siding Upgrading	****							
Waste Transfer	*	**********	**********	**********	**********	**********	**********	**********
Tank Valving	**							
Liquid Waste Disposal		**********	**********	**********	**********	**********	**********	**********
Solid Waste Disposal	**	***			***			***

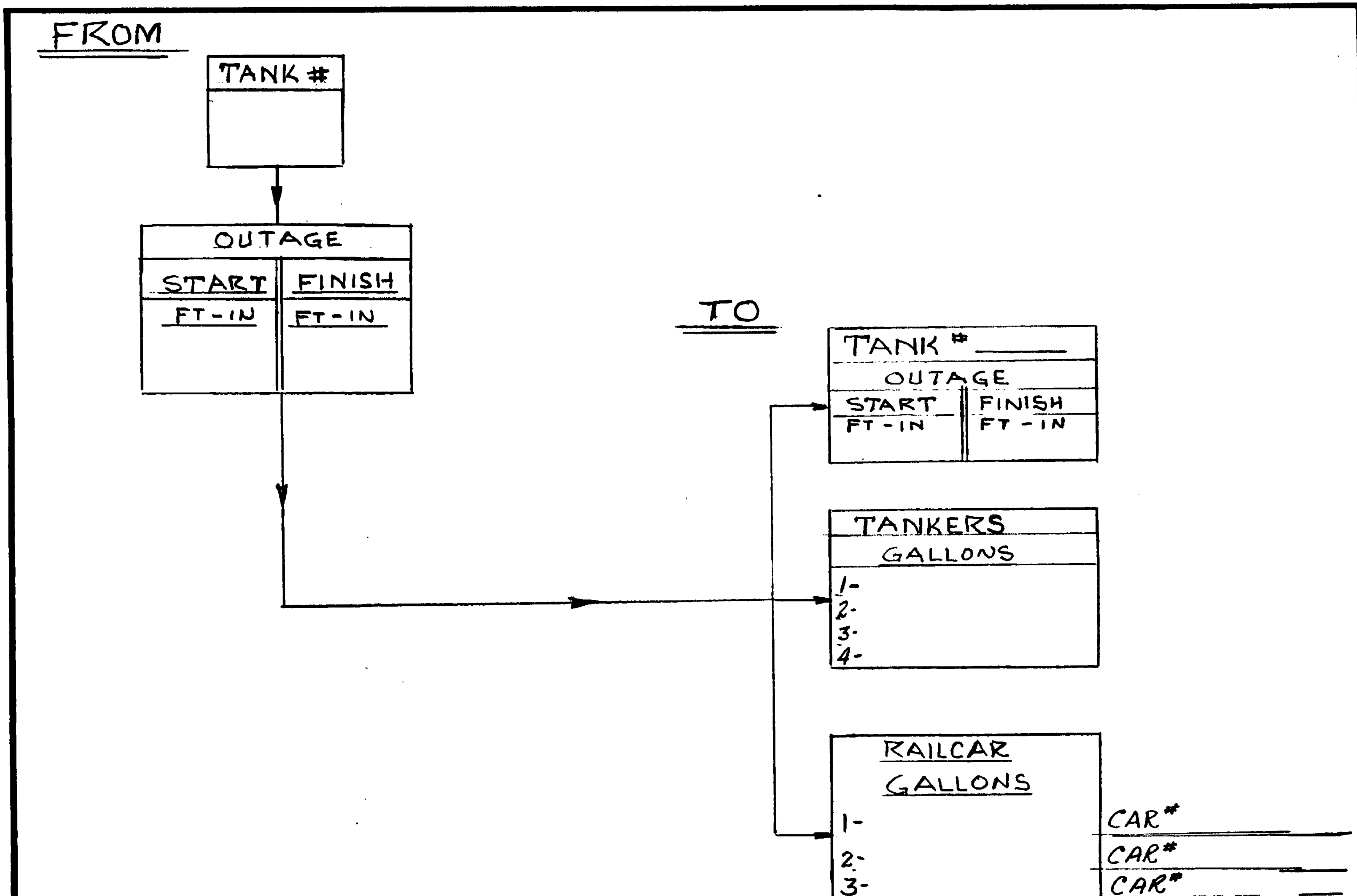
WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION

In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.

EPA PM J. Witkowski	Figure 4
TAT PM J. Brzozowski	Proposed Project Timetable

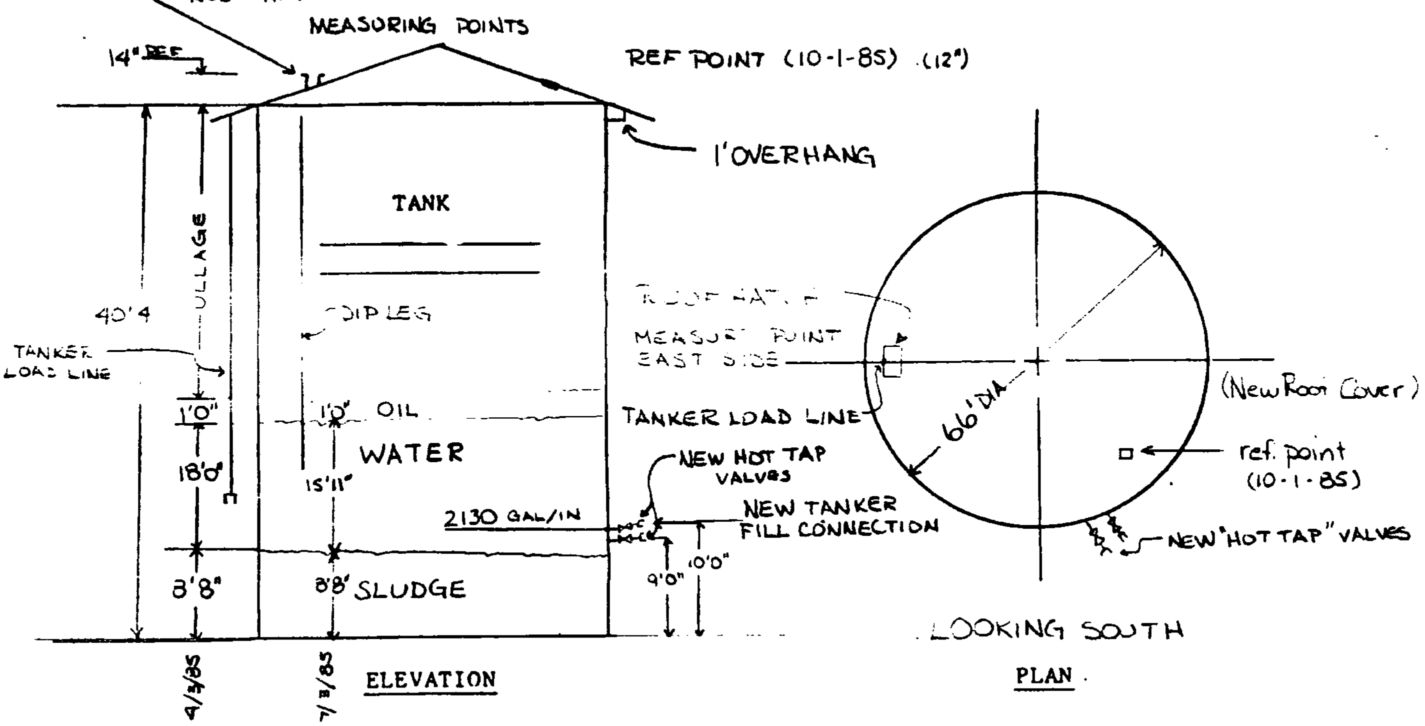


WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 5
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Brzozowski	Projected & Actual Project Costs



SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 6
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Daily Tracking Record

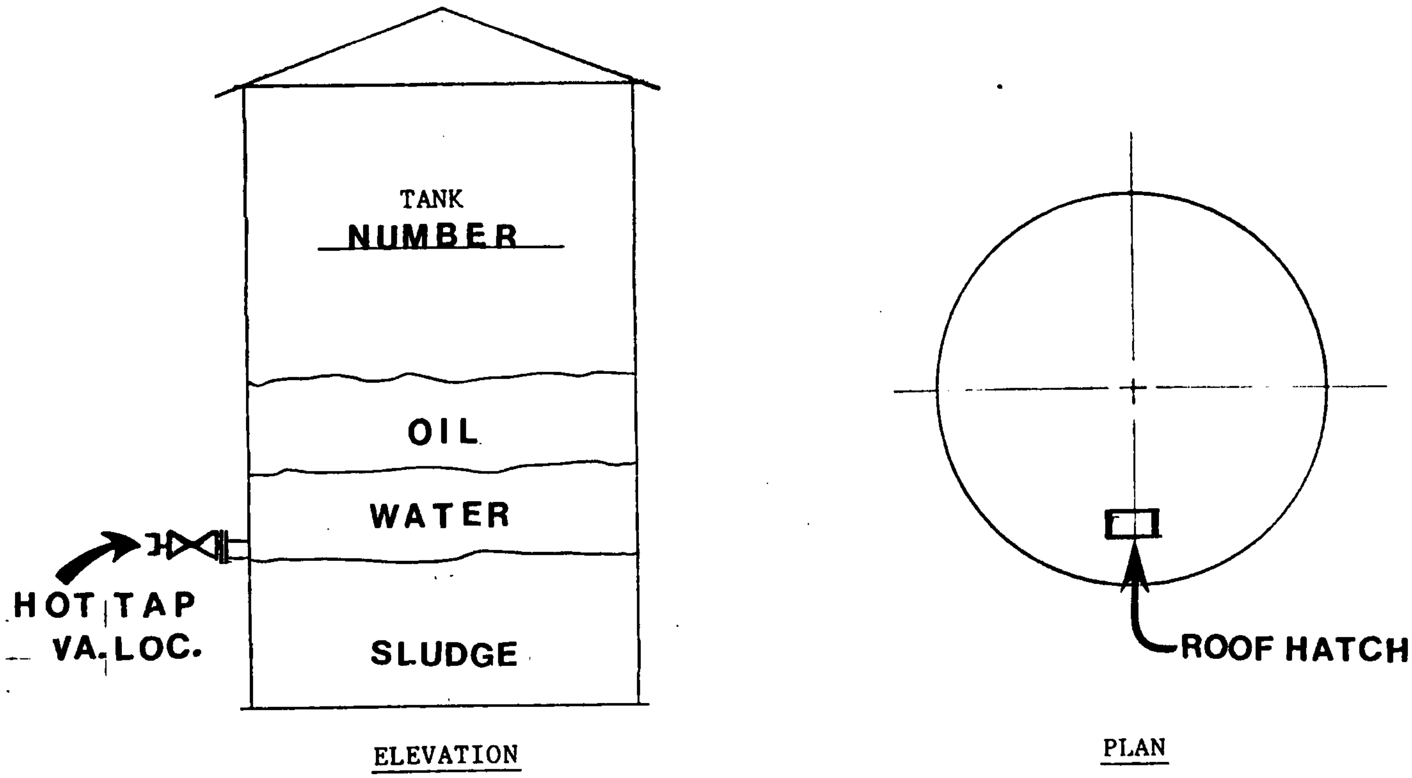
QUANTA - TANK INVENTORY



DATE	ULLAGE	OIL REMOVED			WATER REMOVED			TOTAL VOL. REMAINING*
		VOL. OIL REMOVED	TOTAL OIL REMOVED	VOL. OIL REMAINING	VOL. WATER REMOVED	TOTAL WATER REMOVED	VOL. WATER REMAINING	

*includes oil, water and sludge.

WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. WITKOWSKI	Figure 7
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. MANFREDA	TANK INVENTORY



WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 8
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Generic Tank Phase Layering

During the period beginning October 15, 1984, and lasting through October 14, 1989 the permittee is authorized to discharge from outfall(s) serial number(s) 001

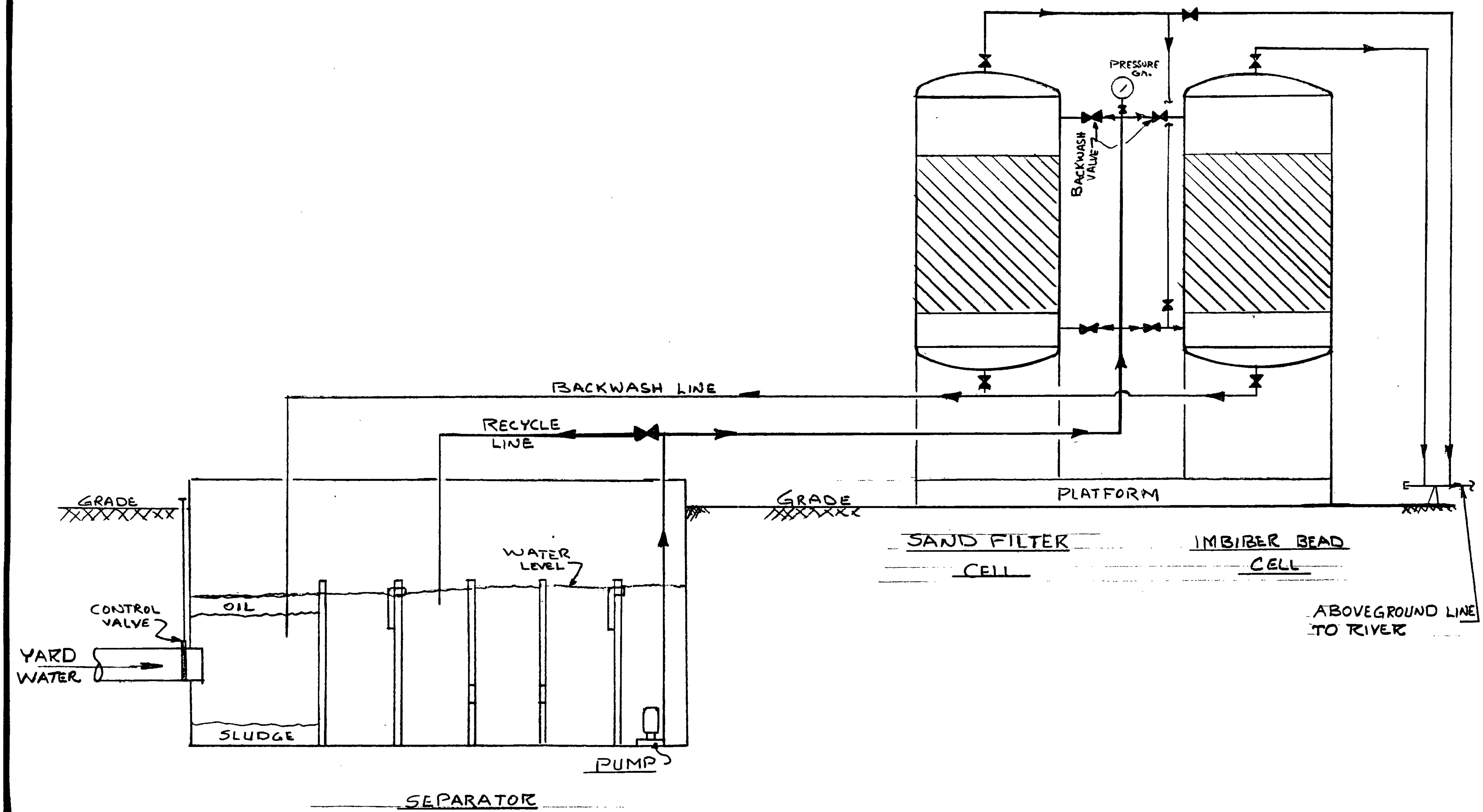
Effluent Characteristic	Discharge Limitations: kgs/day (lbs/day) Avg. Monthly	Discharge Limitations: kgs/day (lbs/day) Max. Daily	Discharge Limitations: other units (specified) Avg. Monthly	Discharge Limitations: other units (specified) Max. Daily	Monitoring Requirements: Measurement Frequency	Monitoring Requirements: Sample Type
Flow-m^3/day (MGD)	N/A	N/A	N/A	N/A	Daily During Discharge	
Phenols	N/A	N/A	N/A	1.0 mg/l	Monthly	Grab
Total Suspended Solids	N/A	N/A	N/A	50 mg/l	Monthly	Grab
Chemical Oxygen Demand	N/A	N/A	N/A	100 mg/l	Monthly	Grab
Total Organic Carbon	N/A	N/A	N/A	50 mg/l	Weekly	Grab
PCB's	N/A	N/A	N/A	None Detectable (<1 ppb)	Monthly	Grab
Total Chromium	N/A	N/A	N/A	1.0 mg/l	Monthly	Grab
Total Cyanide	N/A	N/A	N/A	0.5 mg/l	Monthly	Grab
Lead	N/A	N/A	N/A	0.5 mg/l	Monthly	Grab
Barium	N/A	N/A	N/A	2.0 mg/l	Monthly	Grab
Toxic Organic Pollutants (GC/MS)	N/A	N/A	N/A	-	Quarterly	Grab
Toxicity (Bioassay)	N/A	N/A	N/A	96-Hour LC50 $\geq$ 50% by vol.	Quarterly	
Oil and Grease	N/A	N/A	N/A	15 mg/l*	Monthly**	Multiple Grab

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored daily during discharge by grab sample.

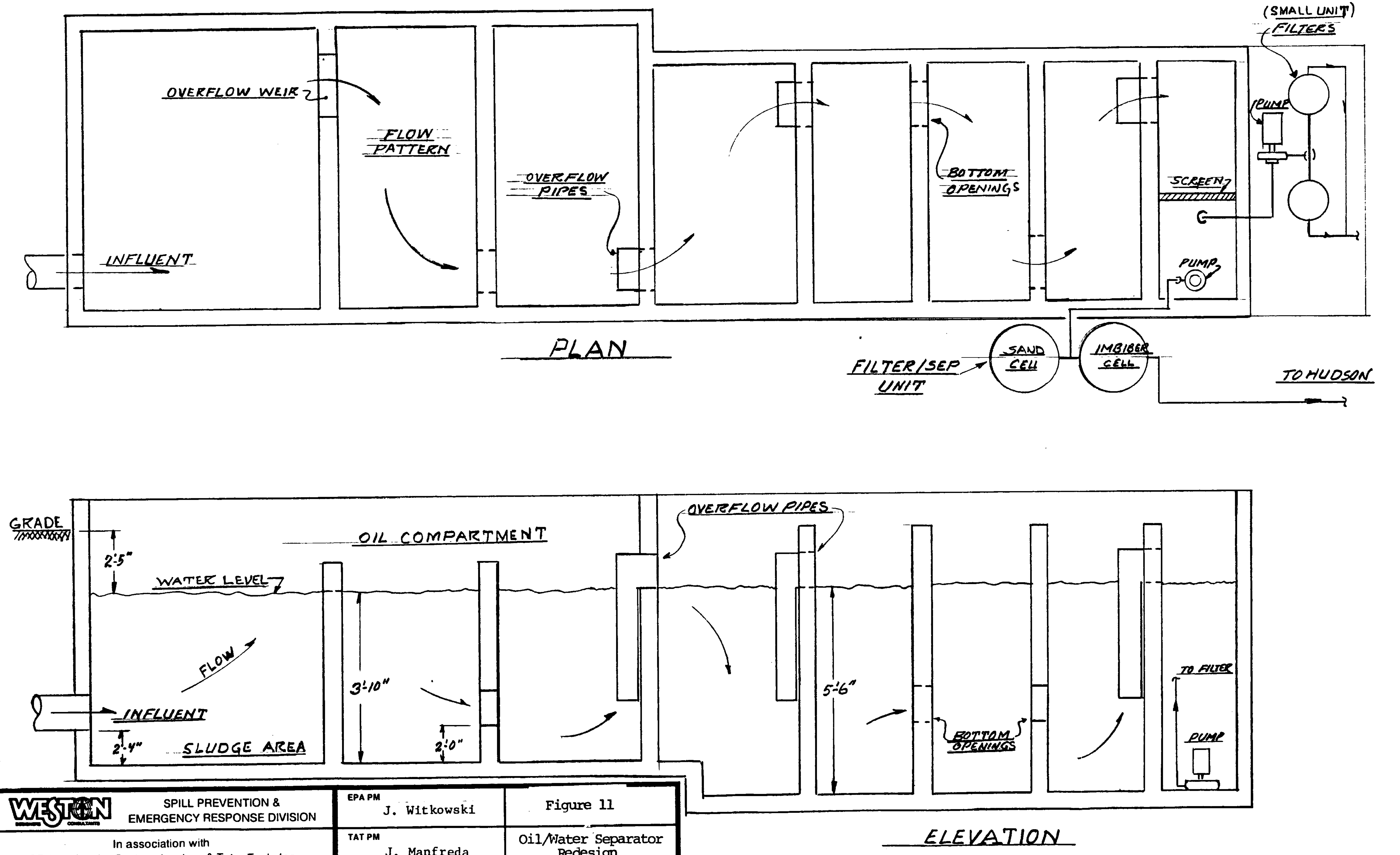
* And none noticeable in the effluent; no visible sheen.

** During the first precipitation event of the month which causes a discharge during working hours and which is preceded by a minimum dry period of 72 hours. The permittee shall take samples 15, 30, and 45 minutes after the onset of the discharge. The permittee shall analyze each sample individually and report a maximum value of the samples.

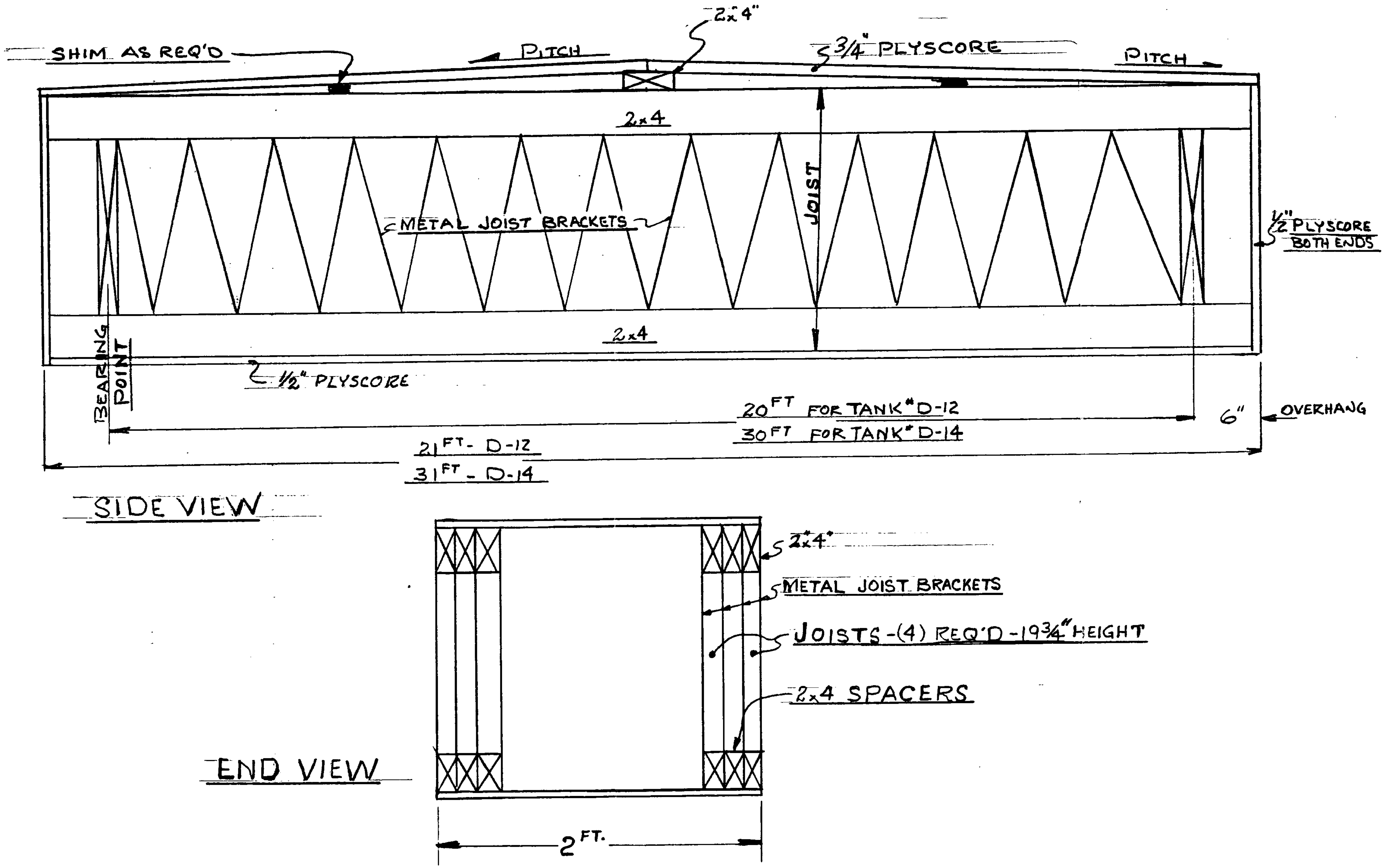
WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 9
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	NJPDES Requirements



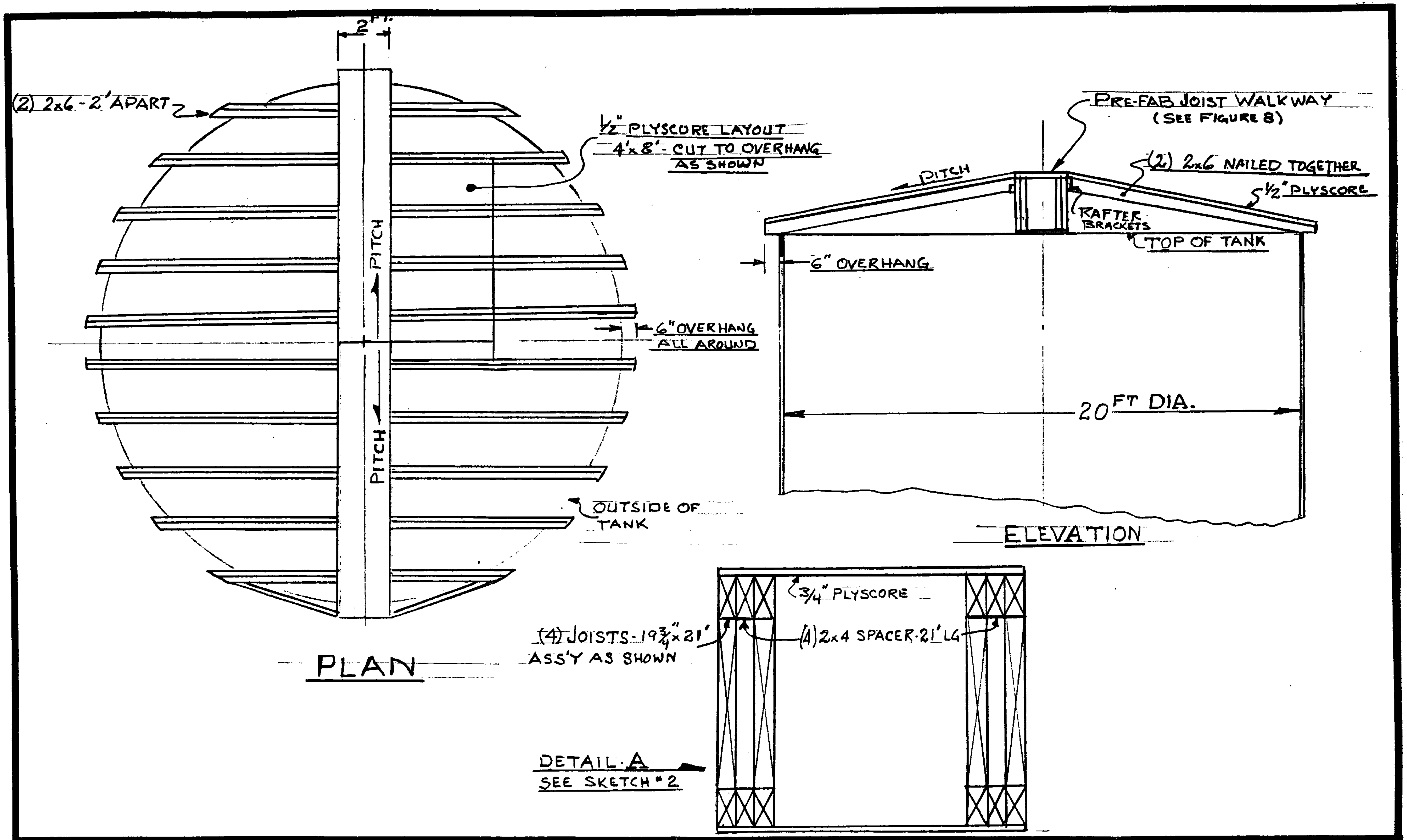
WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 10
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Separator Flow Design



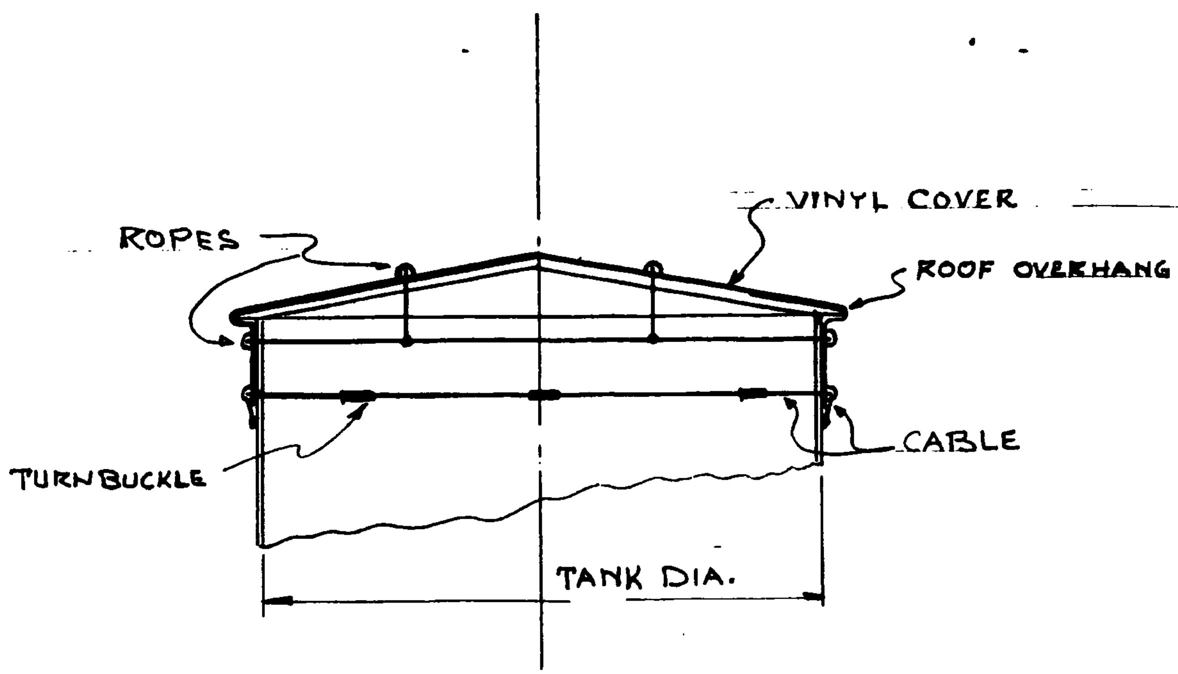
WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 11
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Oil/Water Separator Redesign



WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 12
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Walkway Joist



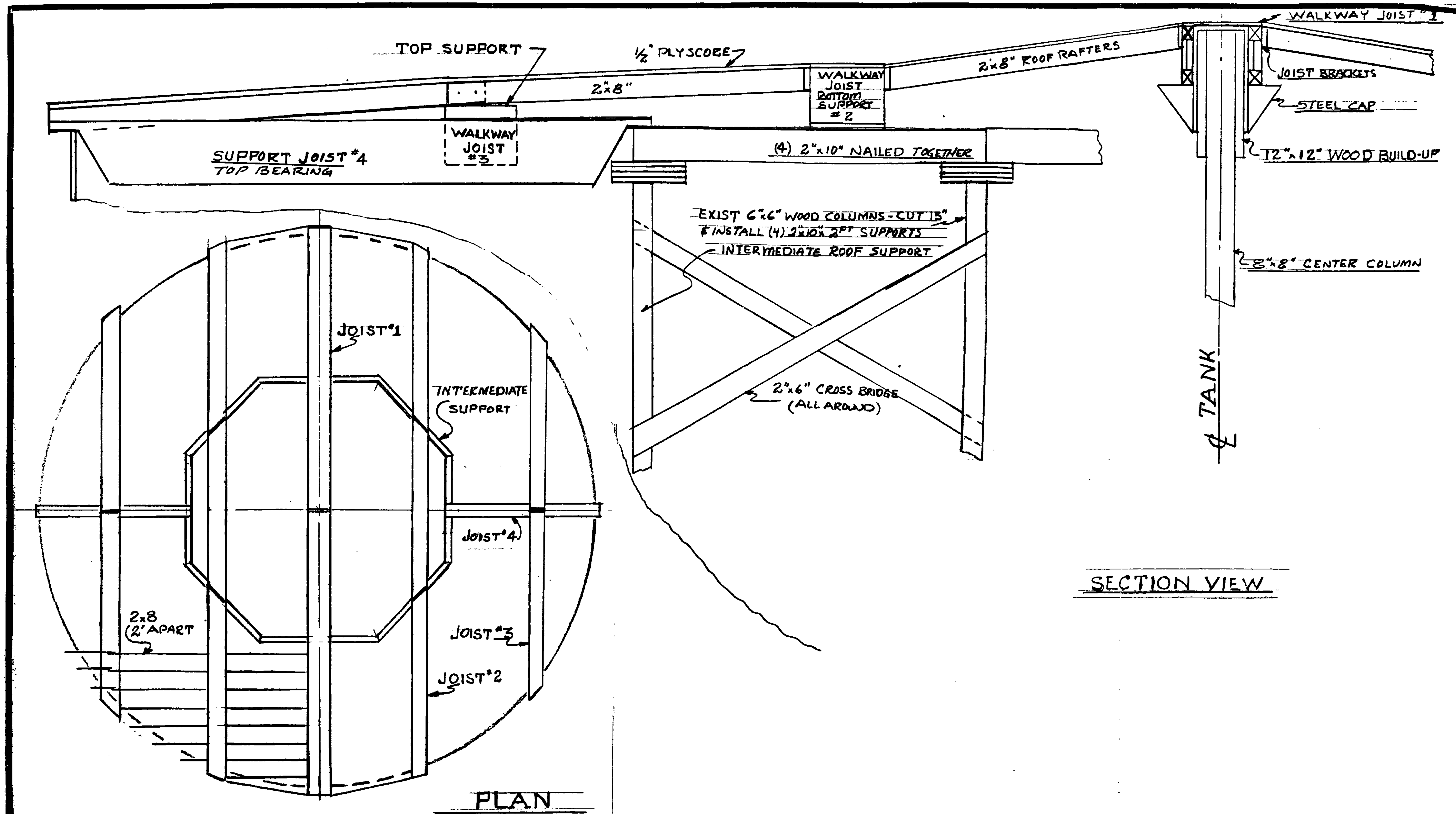
WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 13
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Roof Layout Design



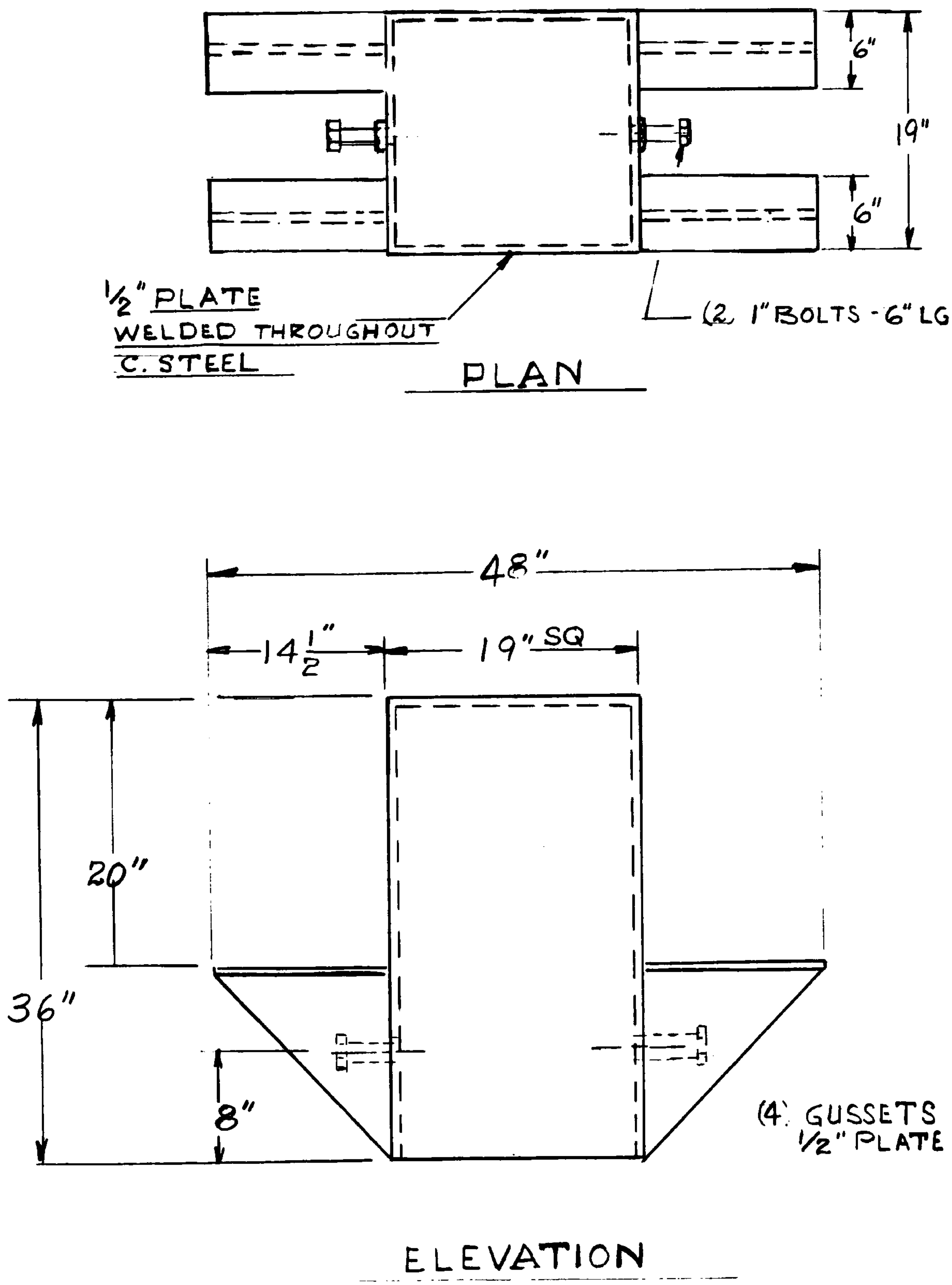
VINYL COVERS

TANK #	DIA.	COVER DIAMETER
A-7	62'	78'
D-10	66'	82'
D-11	54'	70'
D-12	20'	34'
D-8	66'	82'
D-14	30'	44'
D-15	30'	44'

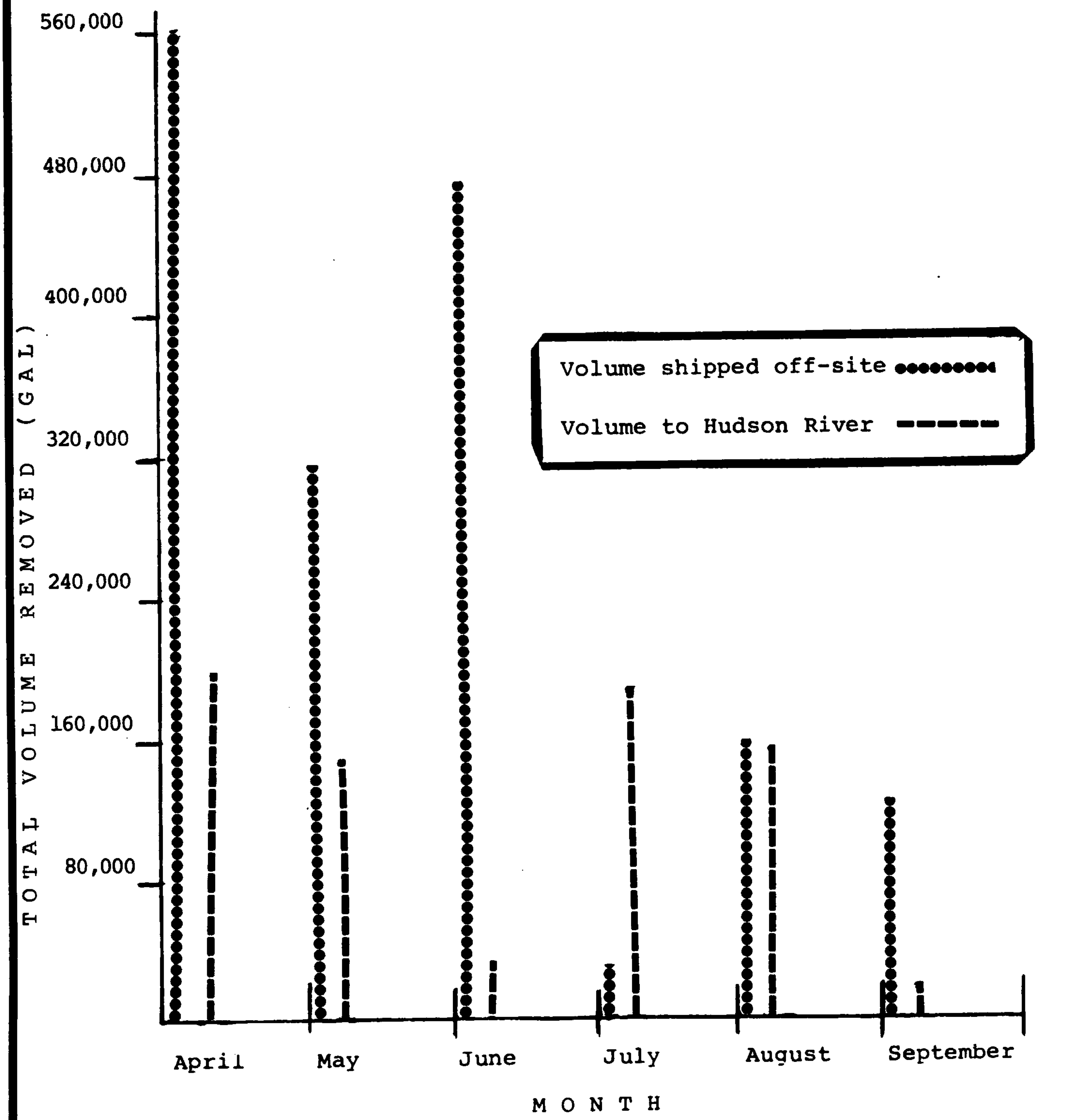
WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 14
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda	Roof Cover Installation



WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION		EPA PM: J. Witkowski	Figure 15
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.		TAT PM: J. Manfreda	Tank A-7 Roof

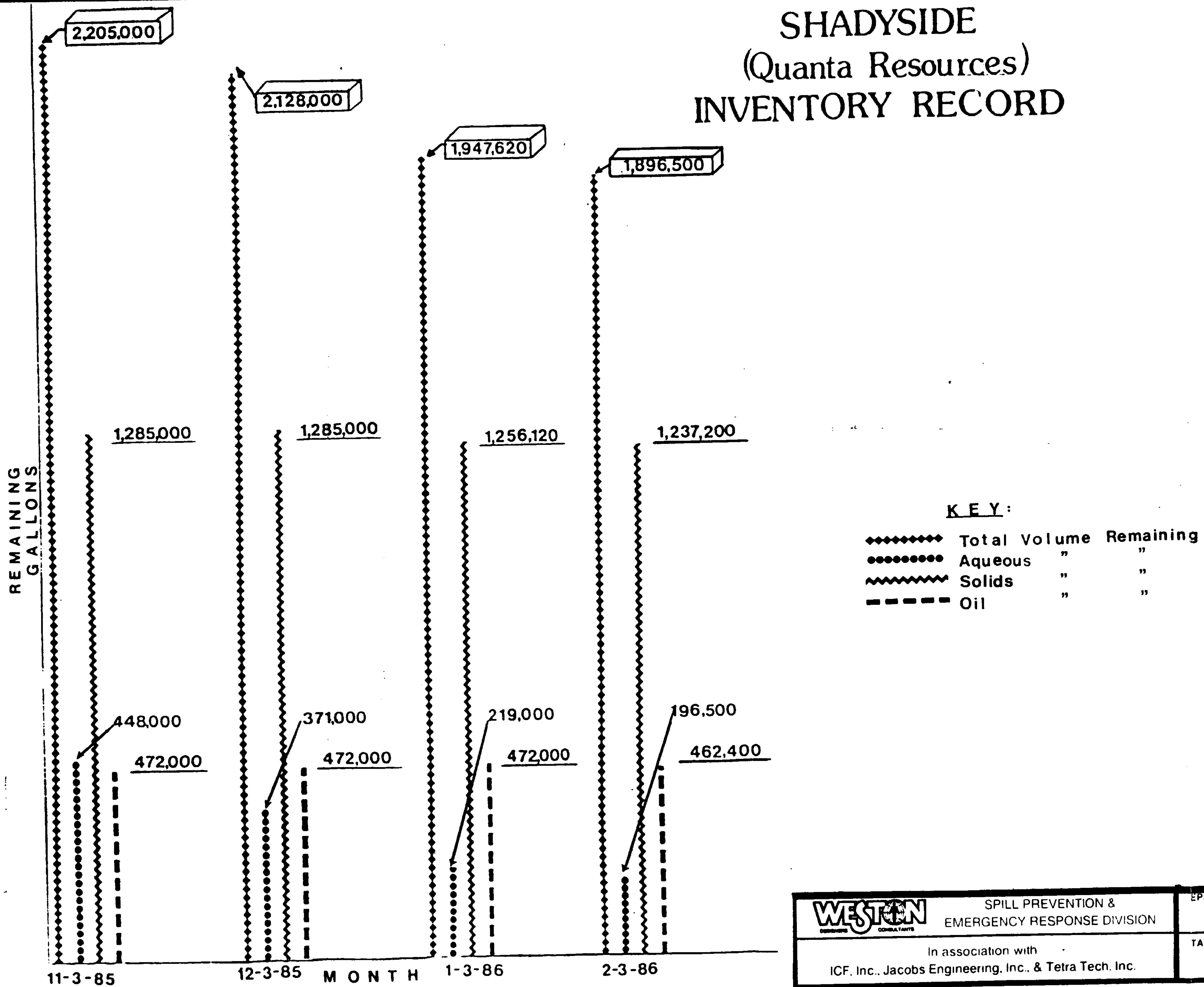


WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 16
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Manfreda J. Brzozowski	Center Support Cap



WESTON SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. WITKOWSKI	FIGURE 17
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. BRZOZOWSKI J. MANFREDA	MONTHLY WASTE REMOVALS

SHADYSIDE
(Quanta Resources)
INVENTORY RECORD



WESTON — SPILL PREVENTION & EMERGENCY RESPONSE DIVISION	EPA PM J. Witkowski	Figure 18
In association with ICF, Inc., Jacobs Engineering, Inc., & Tetra Tech, Inc.	TAT PM J. Brzozowski J. Manfreda	Monthly Waste Inventory

APPENDIX A

PHOTODOCUMENTATION

Photo No. 1 View of Site from Palisades.
3/15/85

Photo No. 2 Initial Mobilization, with
Office & Decon Trailers & Roadstone. 4/5/85

Photo No. 3 Pumping D-10 Aqueous to Tank Truck
4/5/85

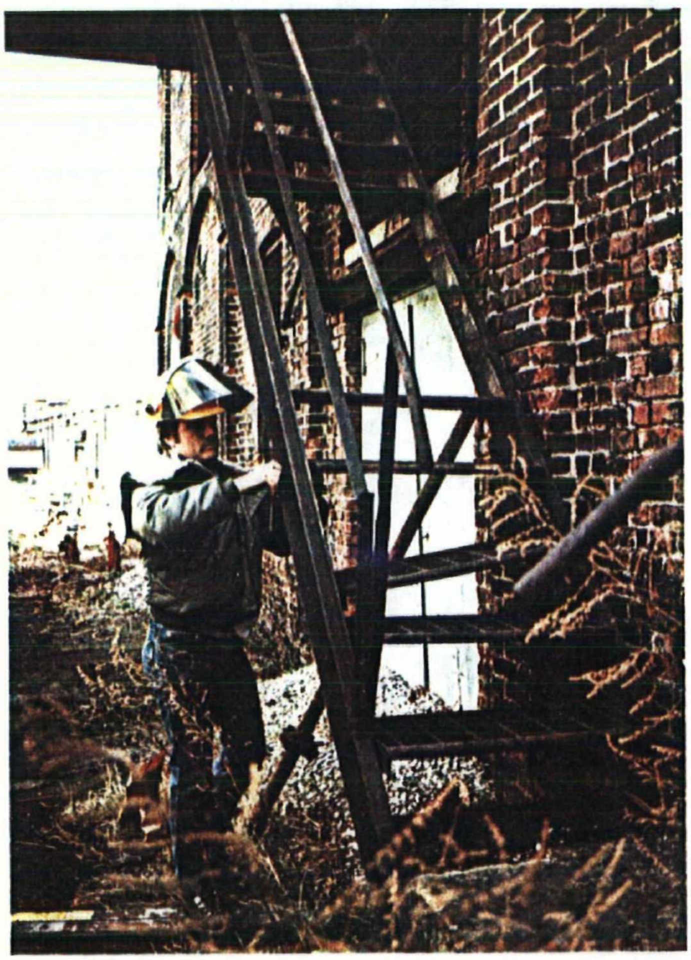


Photo No. 4 Repairing Stair-
way to Tank D-13. 4/10/85

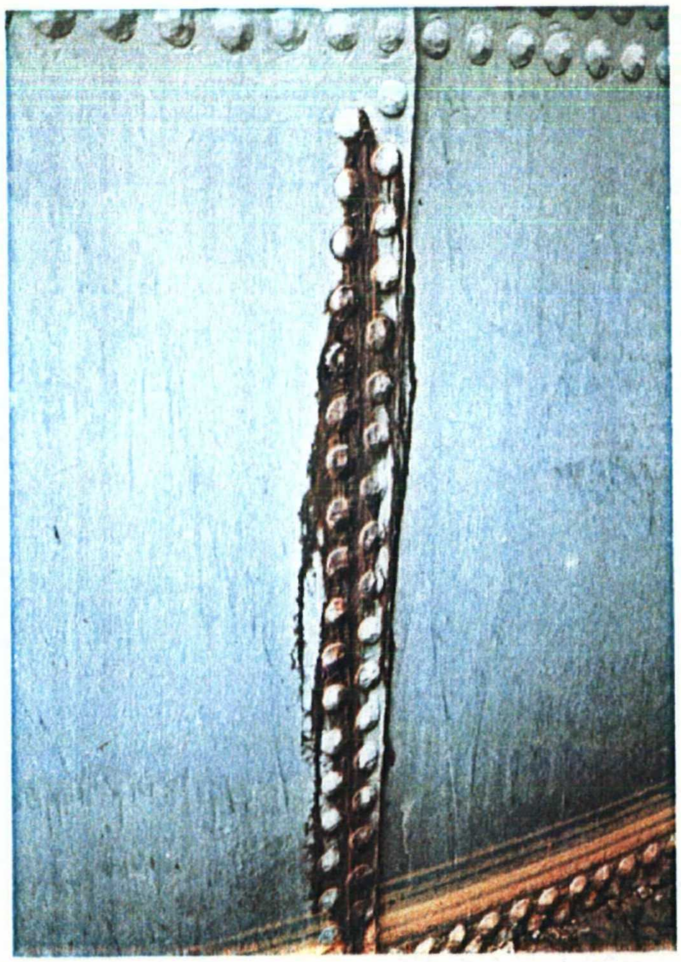


Photo No. 5 Oil Seepage from
Plates & Rivets, Tank A-7.
4/5/85

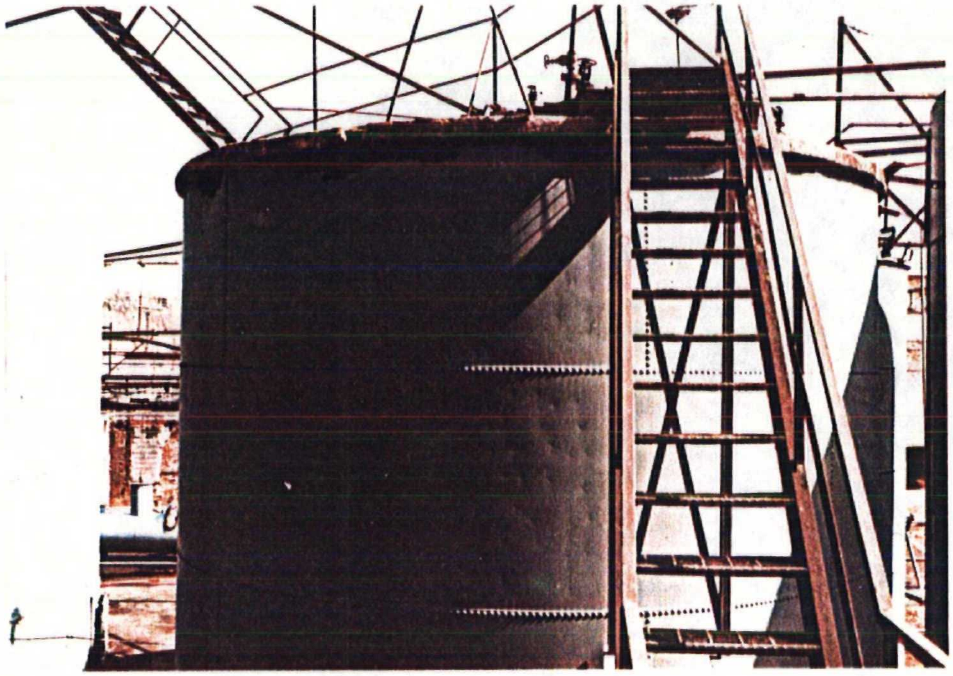


Photo No. 6 Tank D-13, Deteriorated Sidewall 4/8/85

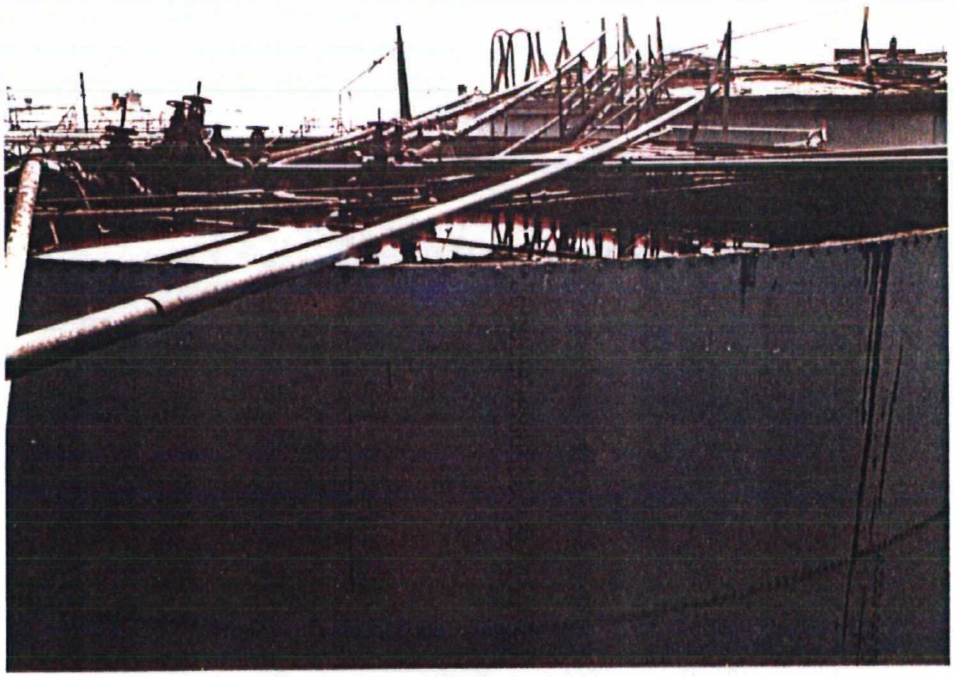


Photo No. 7 Tank D-14, Aqueous Level One Foot From Hole in Sidewall. 4/8/85

Photo No. 8 Sampling Oil/Water Separator Effluent. 4/10/85

Photo No. 9 Continuing Mobilization & Aqueous Removal. 4/10/85

Photo No. 10 Head End of Drained Oil/ Water Separator Showing Bottom Solids. 4/10/85

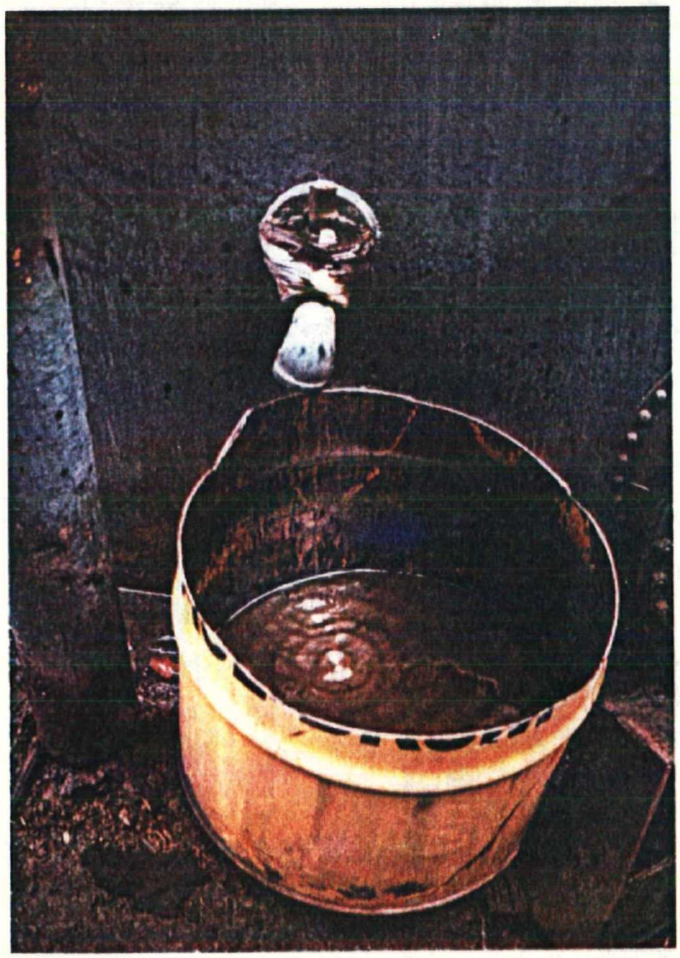


Photo No. 11 Tank D-10 Leaking Valve with Drip Can. 4/11/85

Photo No. 12 Water Line Rupture during Utility Pole Hole Drilling. 4/12/85

Photo No. 13 Ruptured Water Line 4/12/85

Photo No. 14 Water Line Rupture Repair, Obvious Oil Layer about One Foot below Surface. 4/12/85

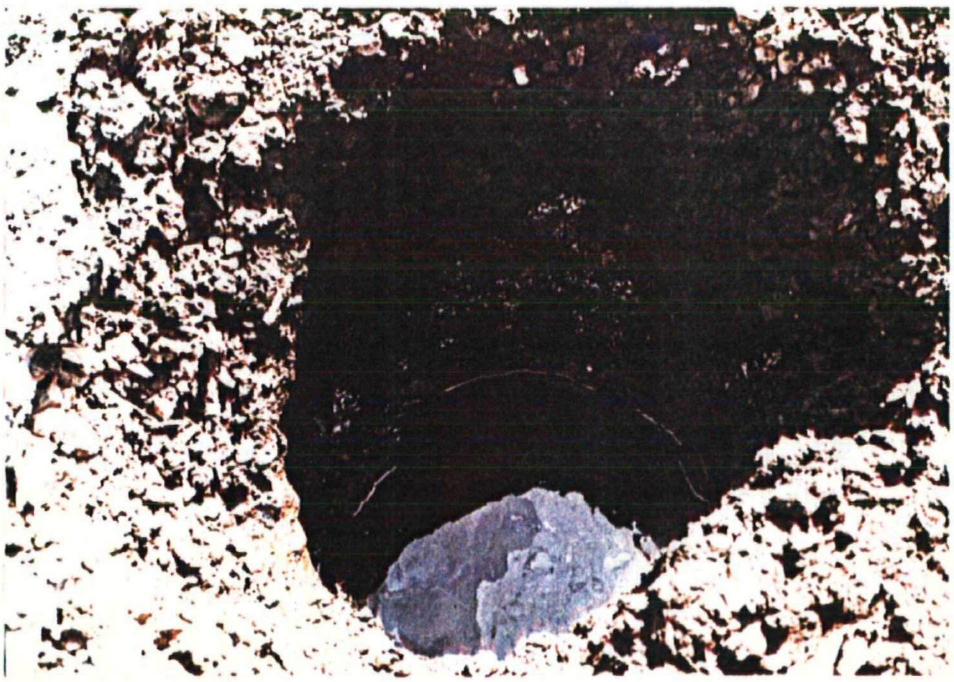


Photo No. 15 Utility Pole Hole Next to Centrifuge Building with Oil Seepage & Sheen. 4/12/85

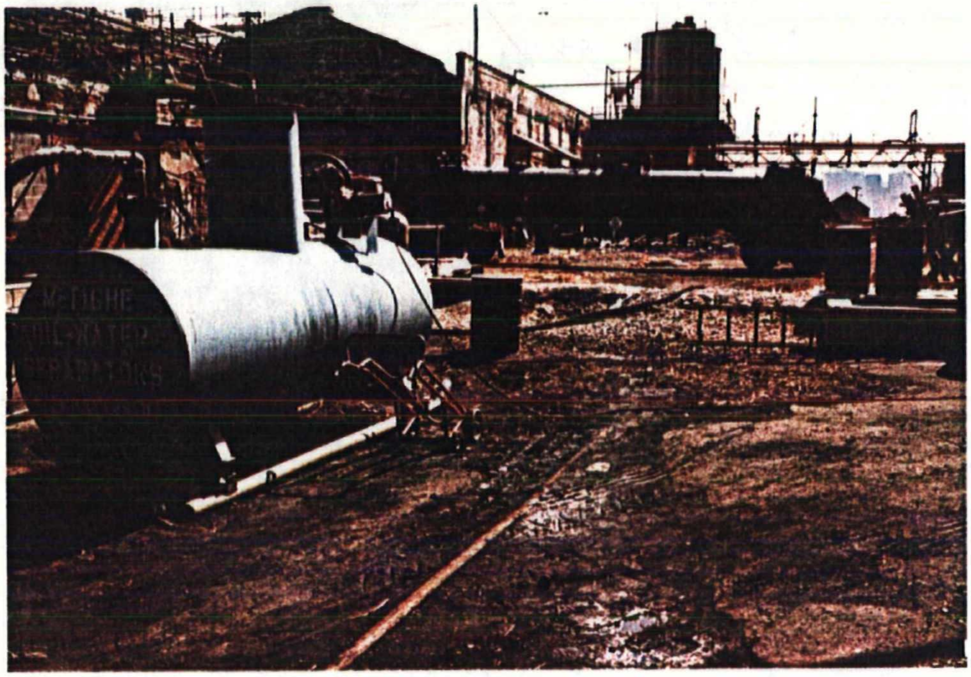


Photo No. 16 Loading Tank Truck with
D-13 Aqueous. 4/12/85

Photo No. 17 Loading Tank Truck with
D-13 Aqueous. 4/12/85

Photo No. 18 Cutting Aerial Piping-
D-Farm. 4/17/85

Photo No. 19 Initial Aqueous
Removal from Tank A-2.
4/15/85

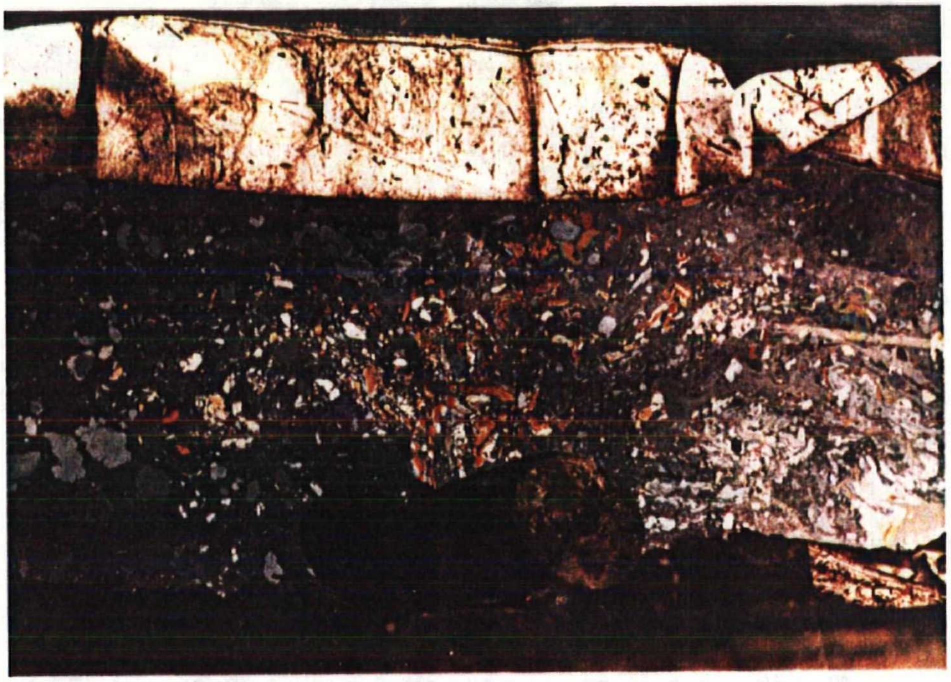


Photo No. 20 Spencer-Kellog Waterfront with Oil Sheen. 4/18/85

Photo No. 21 Oil Sheens on Hudson River Sediments, Quanta. 5/2/85

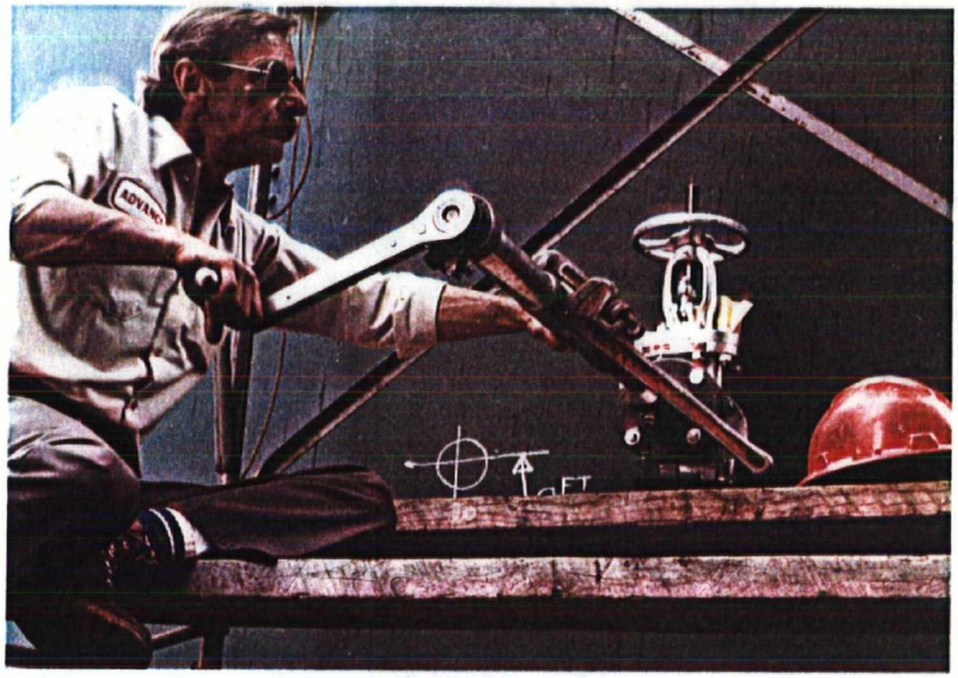


Photo No. 22 Drilling 'Hot Tap' Valve in Tank D-10. 5/1/85

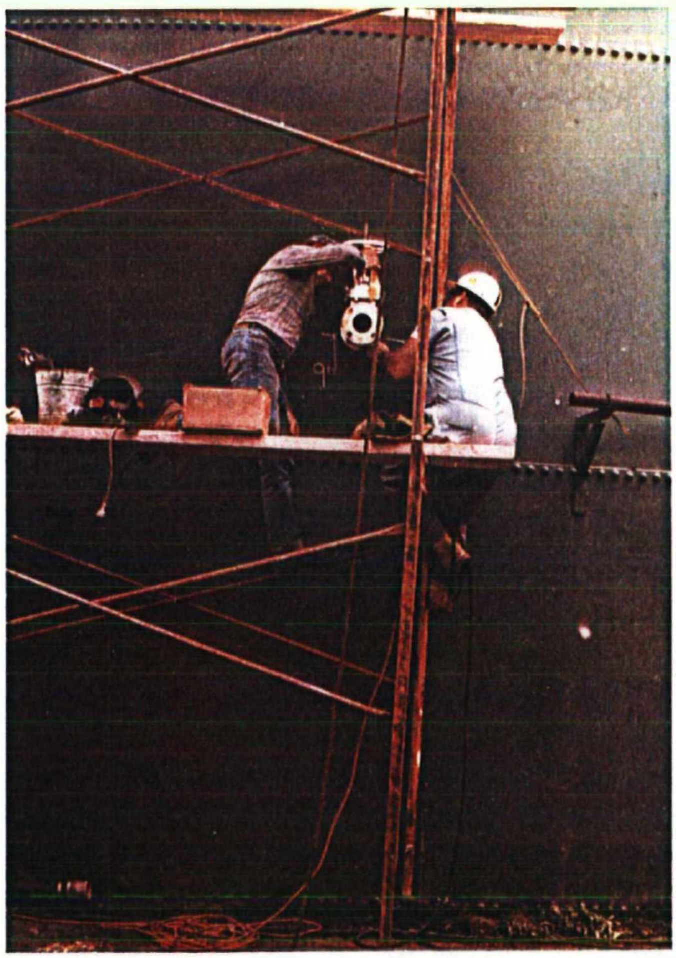


Photo No. 23 Installing 'Hot Tap' Valve on Tank D-10. 5/1/85

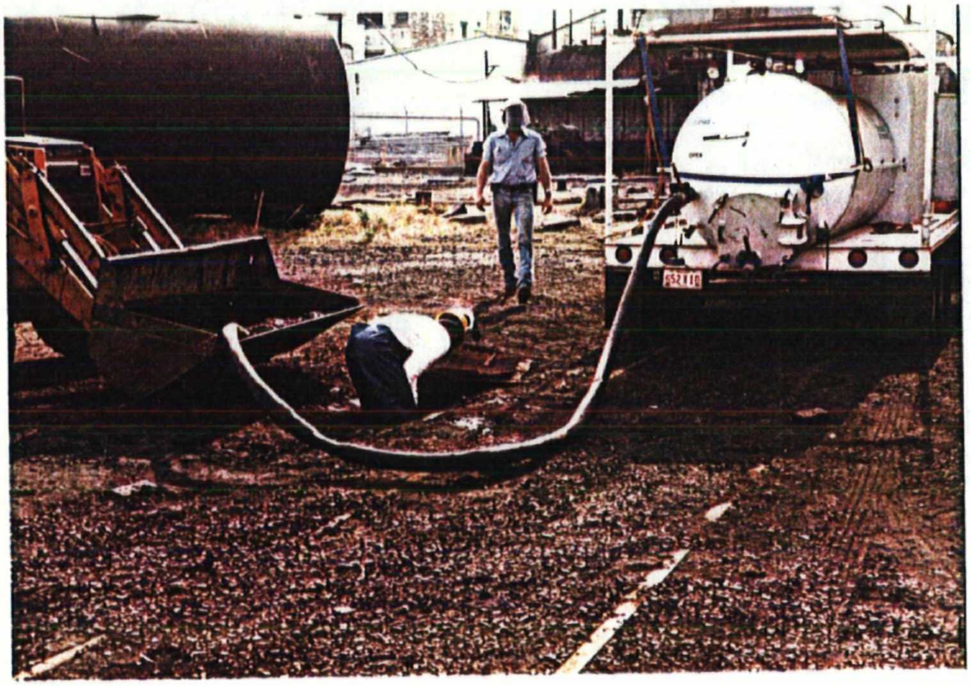


Photo No. 24 Removing Solids from Separator Inflow Line Basin. 4/30/85

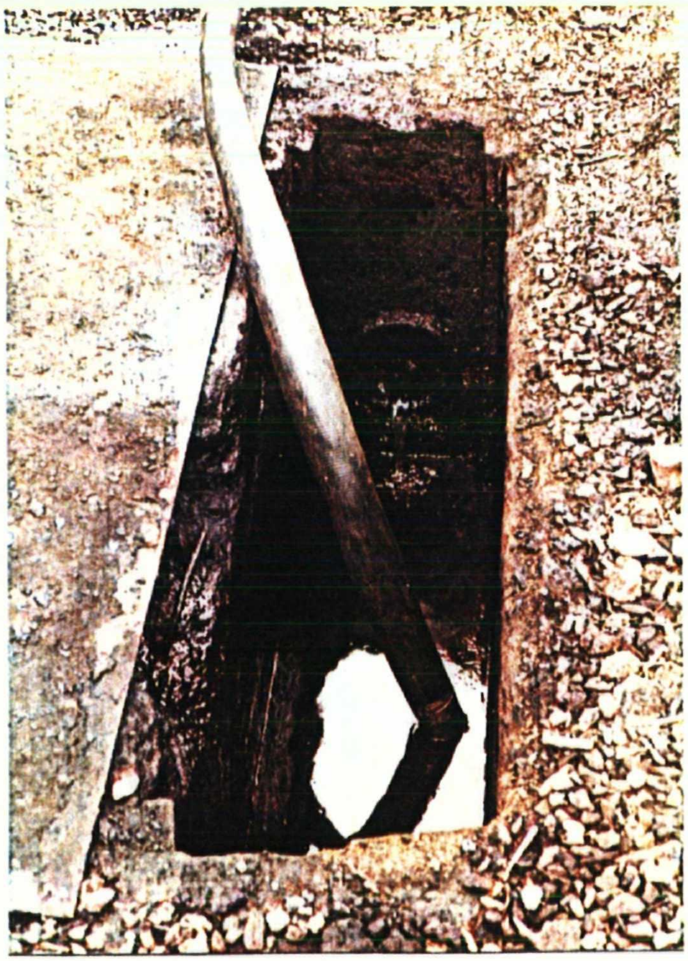


Photo No. 25 Pumping Out Clogged Drainage Line. 5/2/85

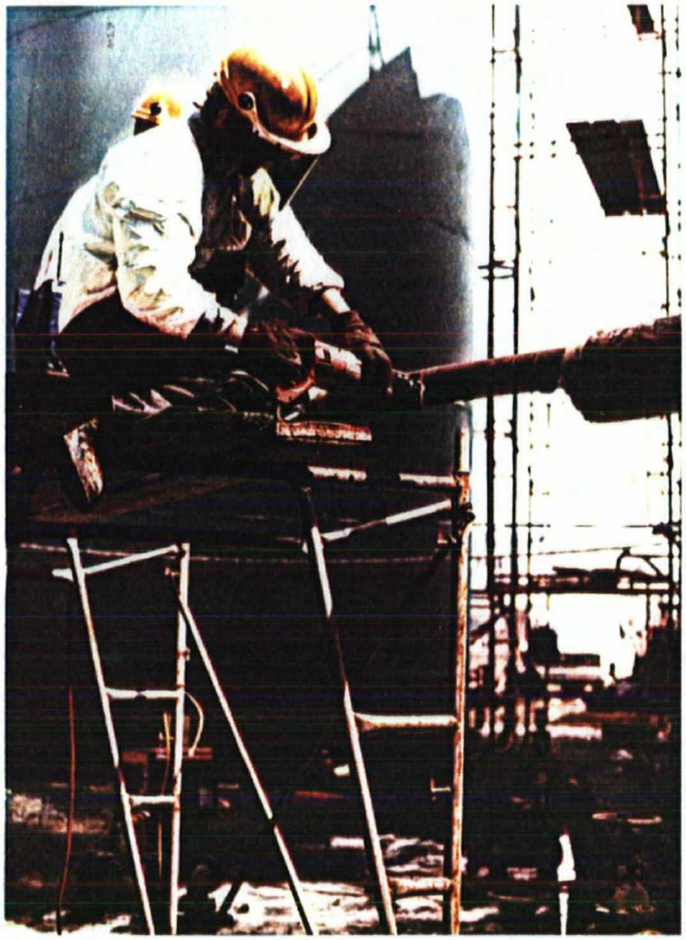


Photo No. 26 Cutting & Removing Aerial Piping for Safety in D-Farm. 5/1/85

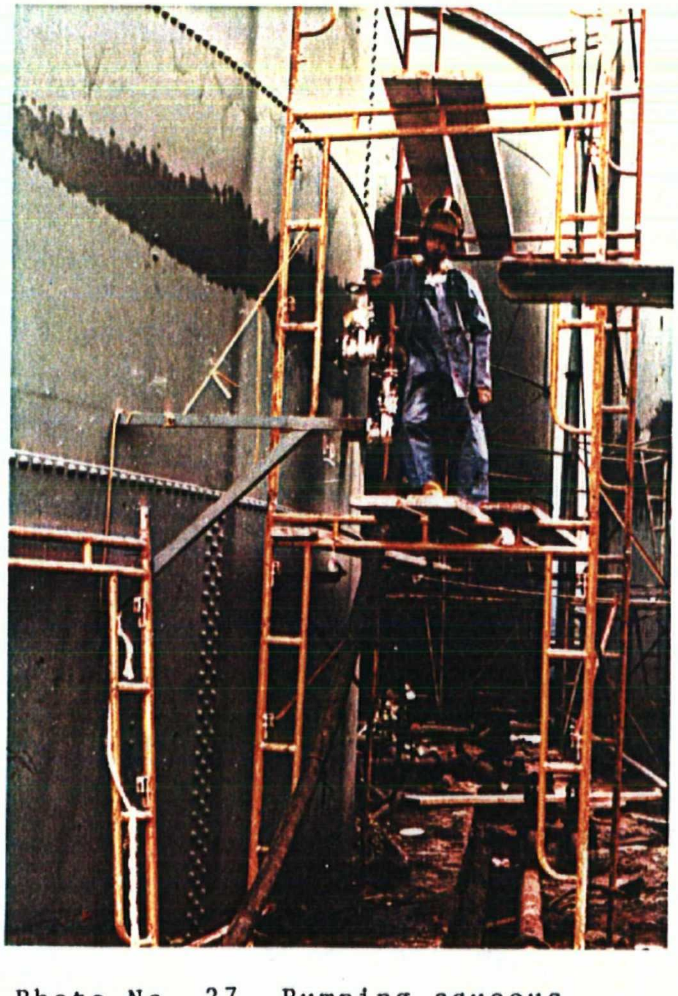


Photo No. 27 Pumping aqueous from 'Hot Tap' Valve on Tank D-10. 5/1/85

Photo No. 28 Flooding of Site
5/3/85

Photo No. 29 Removing Deteriorated Boom
from Hudson River. 5/9/85

Photo No. 30 Measuring Thickness of Tank Wall. 5/9/85

Photo No. 31 Safety Signs by Man Gate. 5/9/85

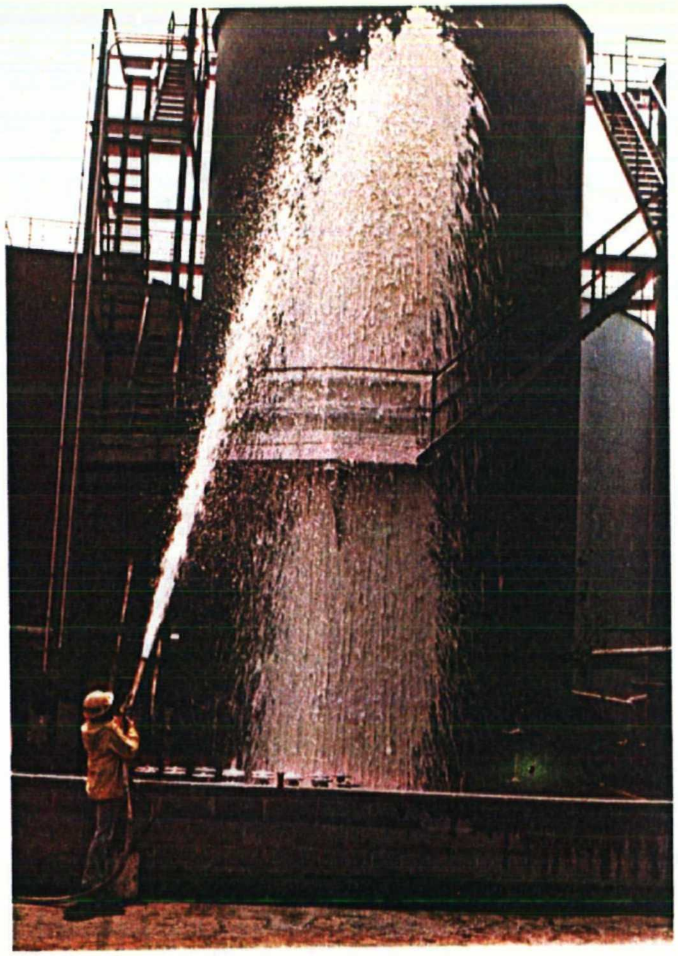


Photo No. 32 Testing Firefighting Foam. 5/13/85

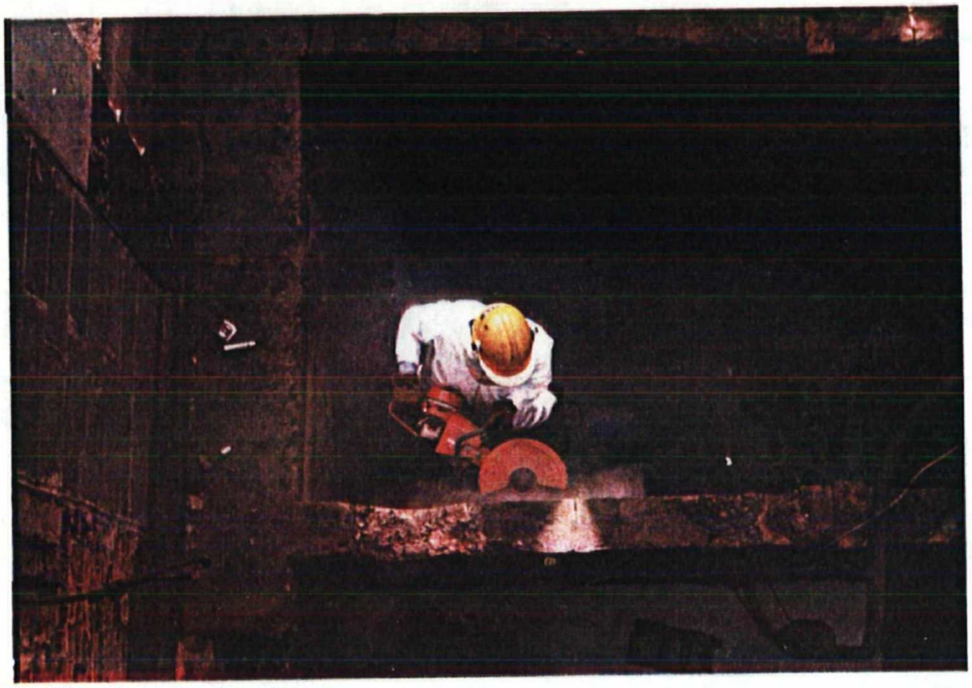


Photo No. 33 Cutting New Flow Pathways through Oil/Water Separator. 5/13/85

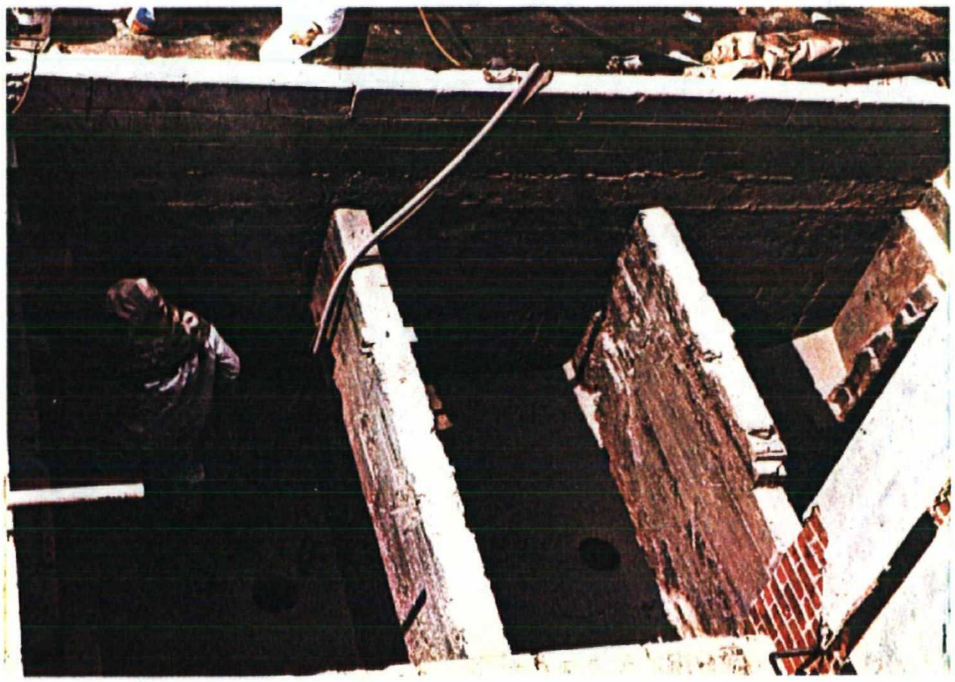


Photo No. 34 Sandblasting Separator 5/13/85

Photo No. 35 Leaking Pipeline between C & D Farms. 5/15/85

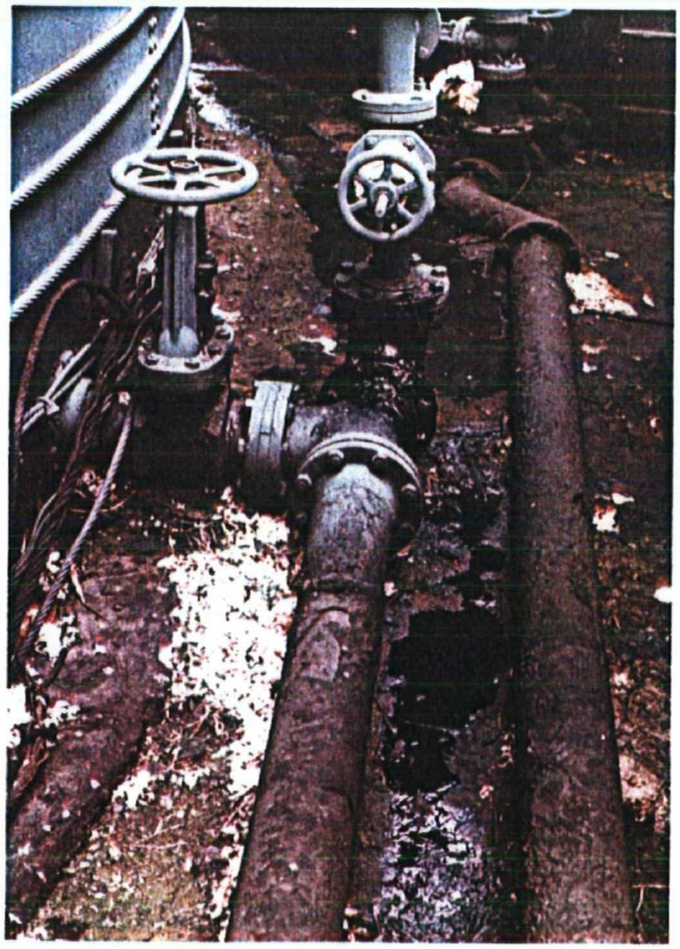


Photo No. 36 Leaking Pipeline from Tank A-3. 5/16/85

Photo No. 37 Condensation Layer,
Tank D-10. 5/13/85

Photo No. 38 Butterworth, for
Tank & Pipeline Cleaning. 5/20/85

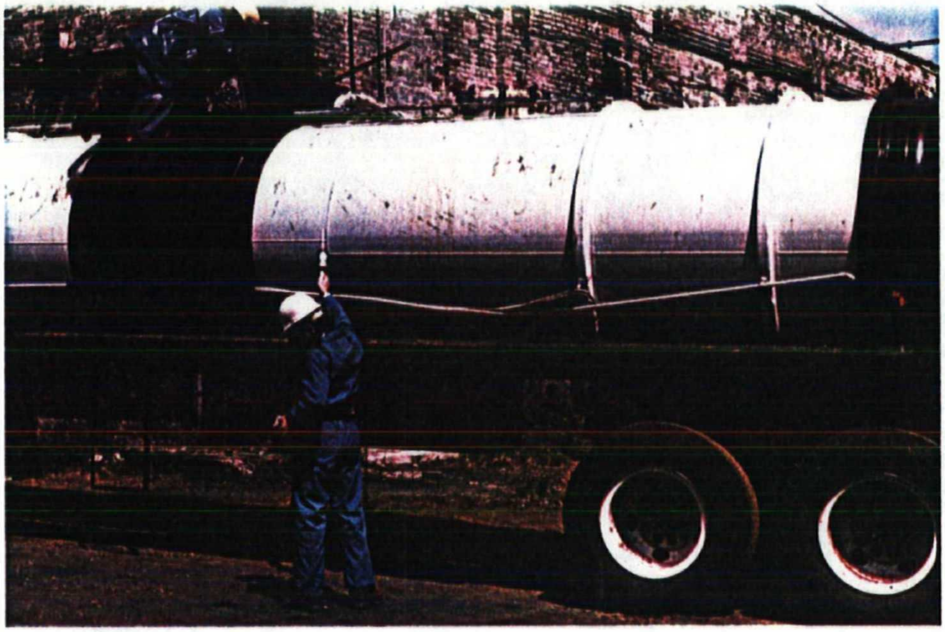


Photo No. 39 Air Monitoring during Tanker Pumping Operation. 5/16/85

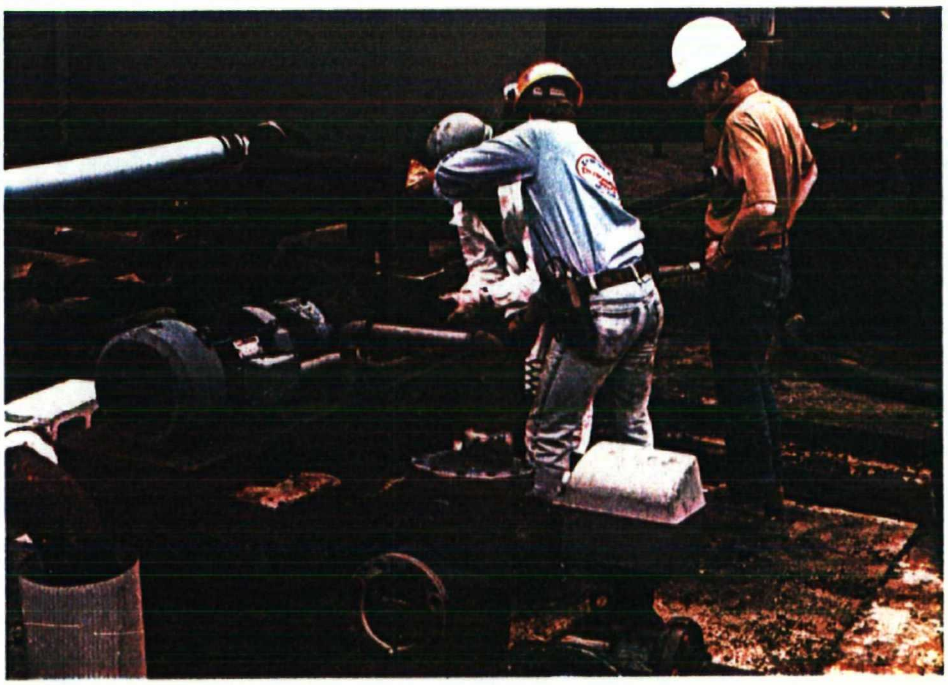


Photo No. 40 Repairing Viking Pump, C- Farm. 5/23/85

Photo No. 41 Solids Removal from Tank C-10. 5/29/85

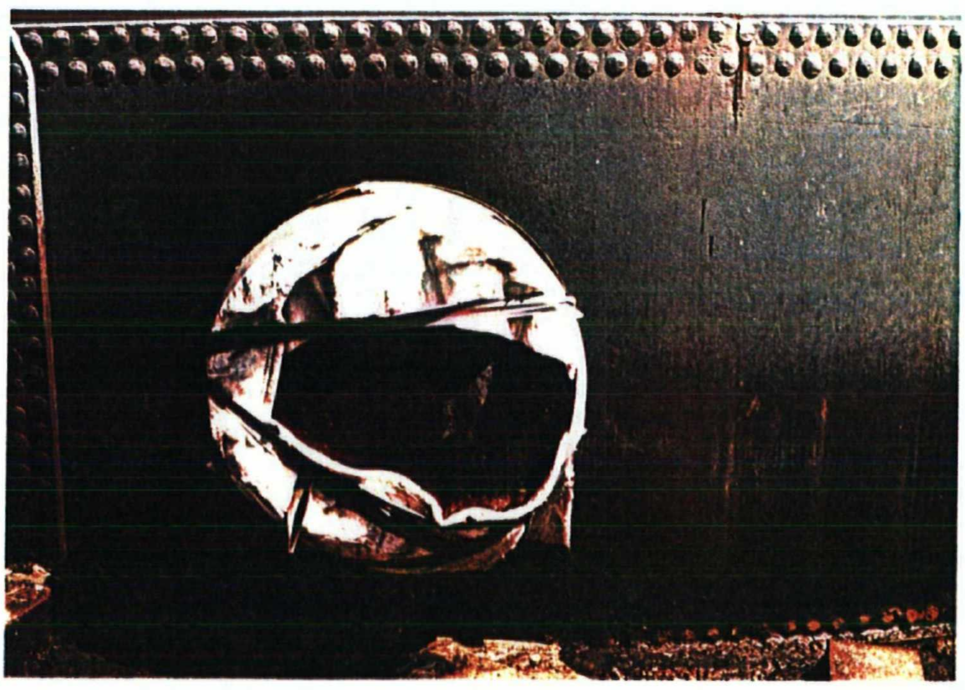


Photo No. 42 Leaking Hatch Cover, Tank A-7. 4/5/85

Photo No. 43 Plugged Leak, Tank A-4.
5/23/85

Photo No. 43A Leak, Tank D-9, PCBs
<50ppm. 5/30/85

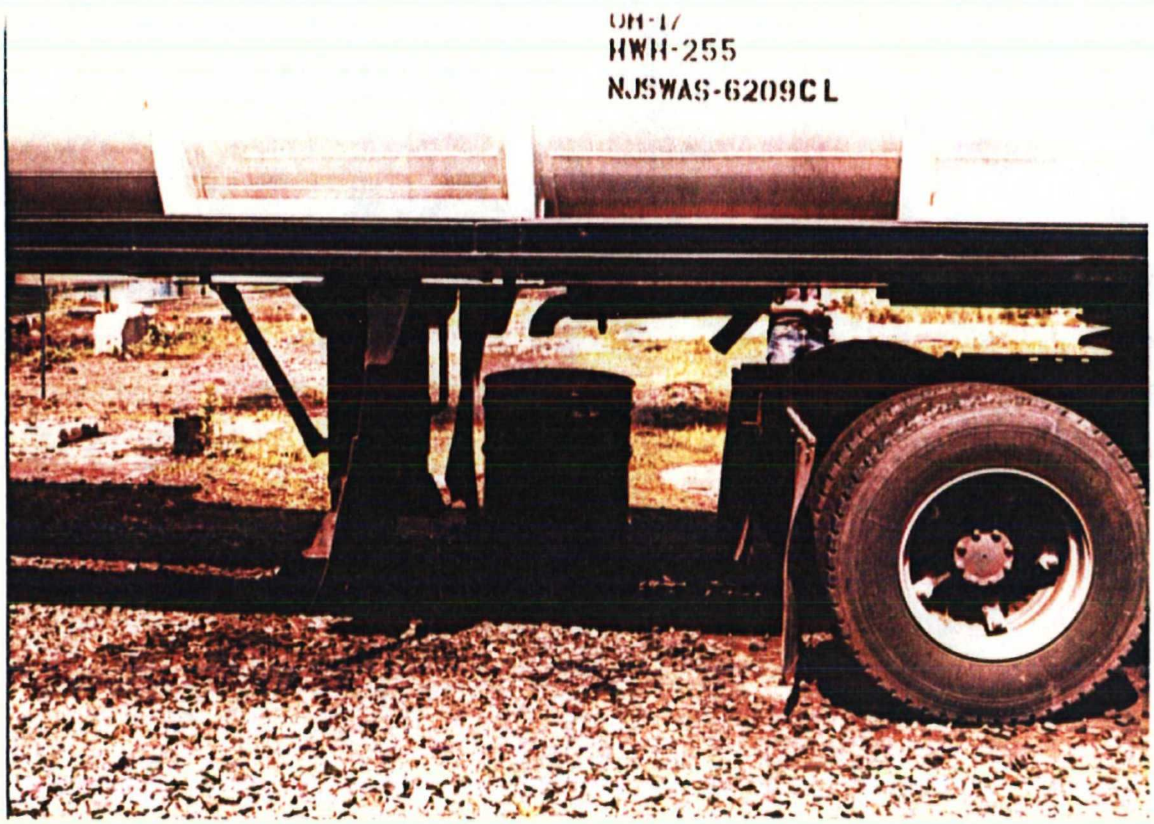


Photo No. 44 Vapors venting during Tank Truck Pumping Operations. 6/4/85

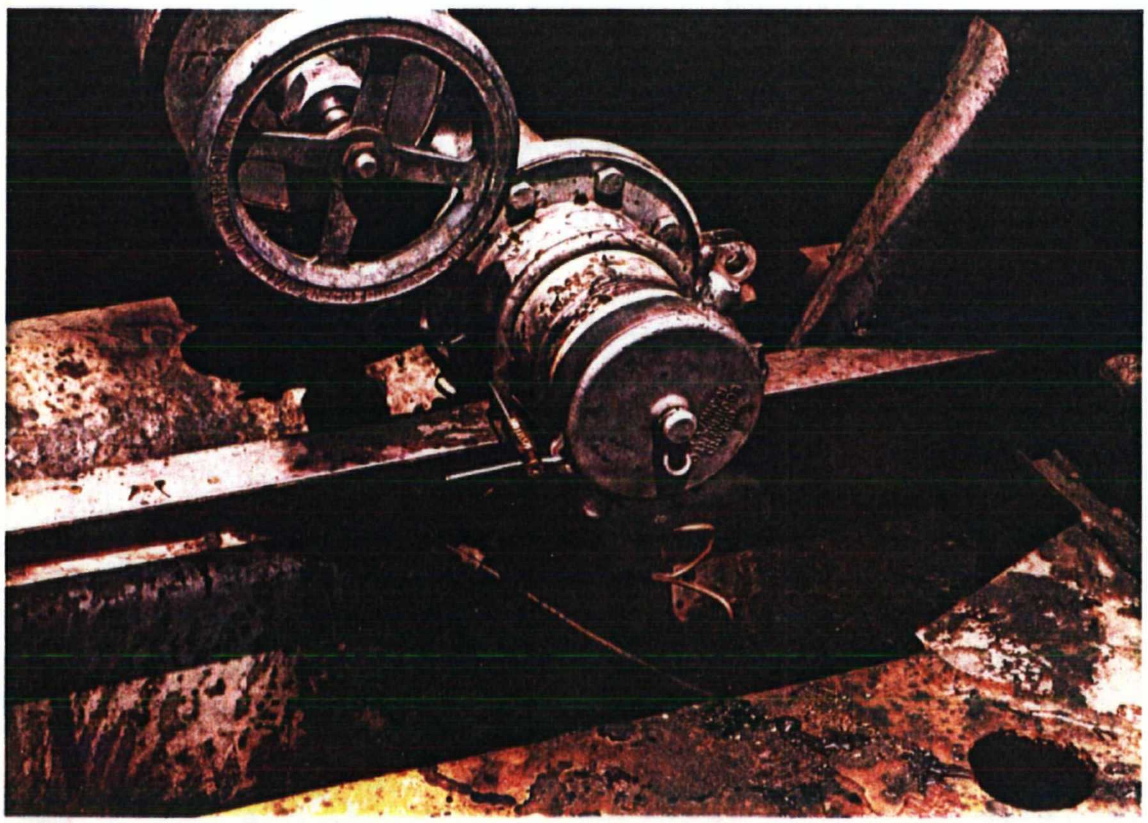


Photo No. 45 Renovating On Site
Rail Spur. 6/10/85

Photo No. 46 Rail Spur Renovation
by Gate. 5/31/85

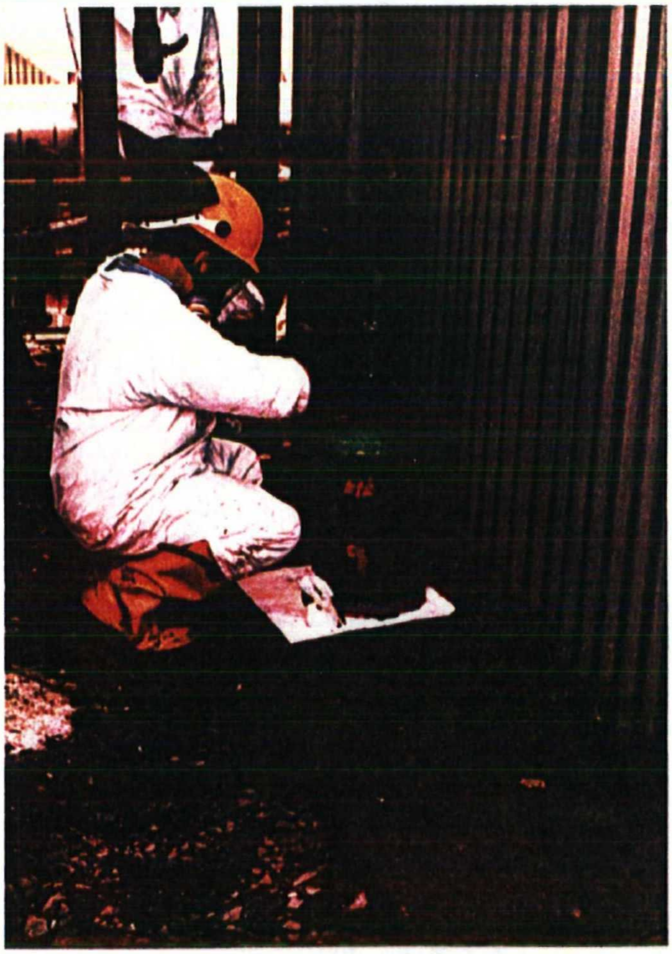
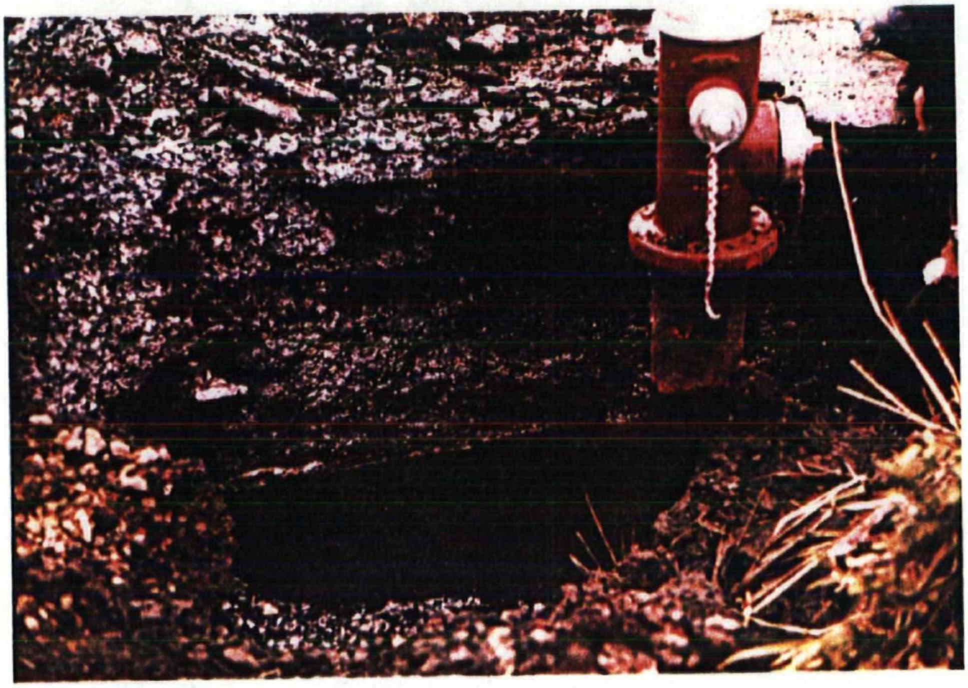
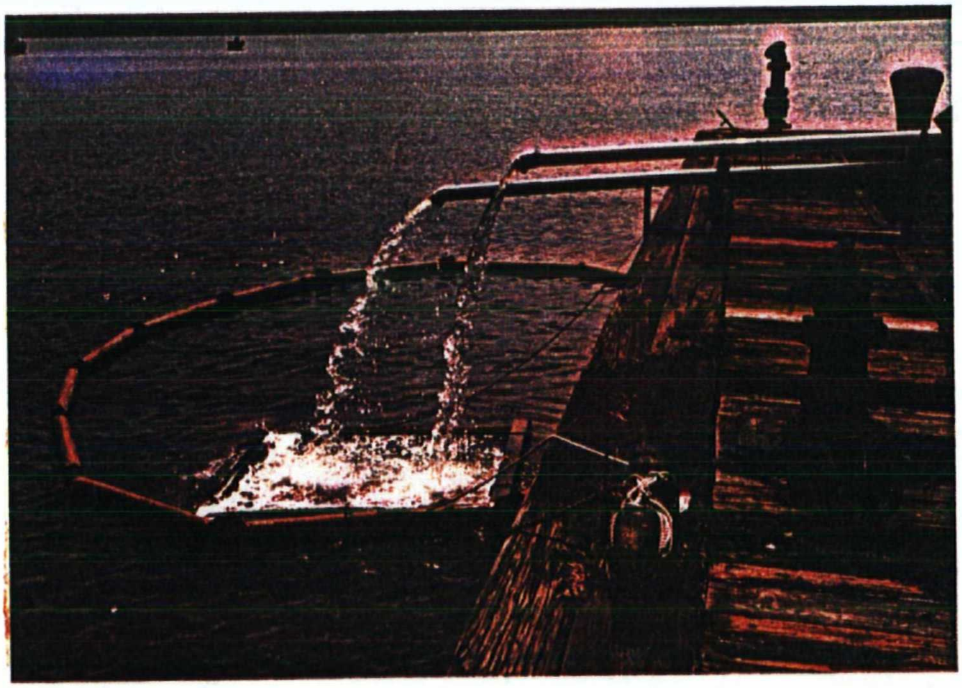


Photo No. 47 Sampling Oil.
Tank A-1. 6/7/85



<u>Photo No. 48</u> Contaminated Soil & Sub-
surface Water Exposed during Hydrant Repair.
6/12/85



<u>Photo No. 49</u> Two Overland Discharge Lines,
One Recently Constructed. 6/17/85

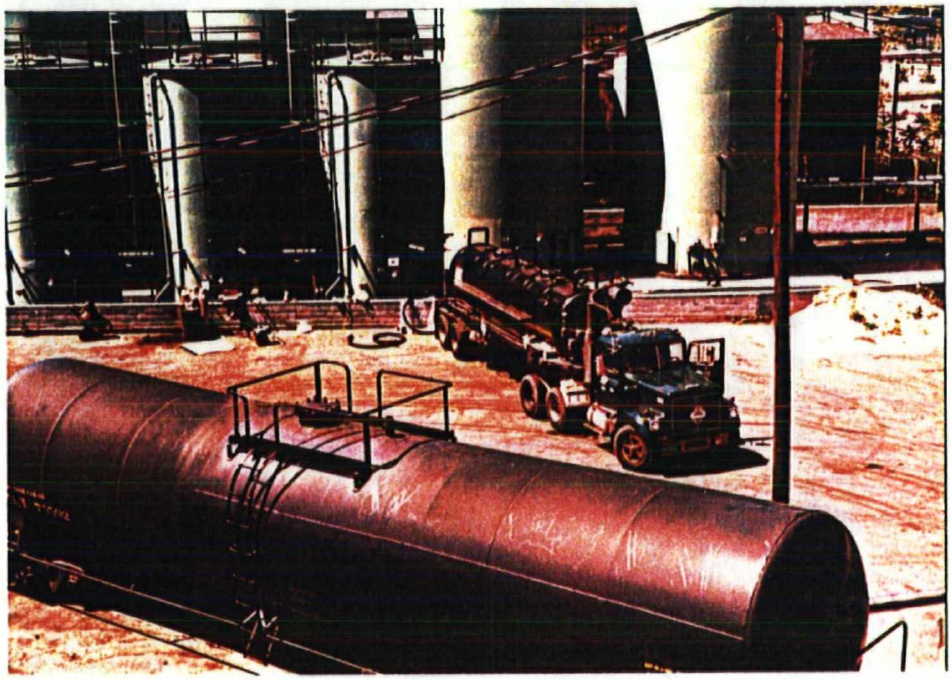


Photo No. 50 Pumping Solids from C-11 to Tank Truck. 6/19/85

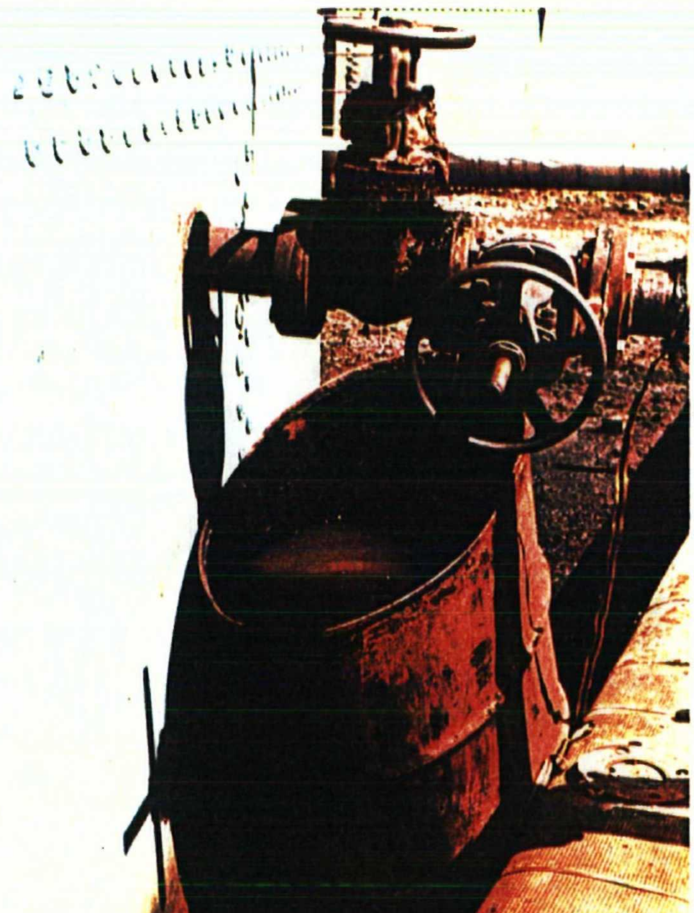


Photo No. 51 Valve Leakage, Tank A-7. 6/18/85

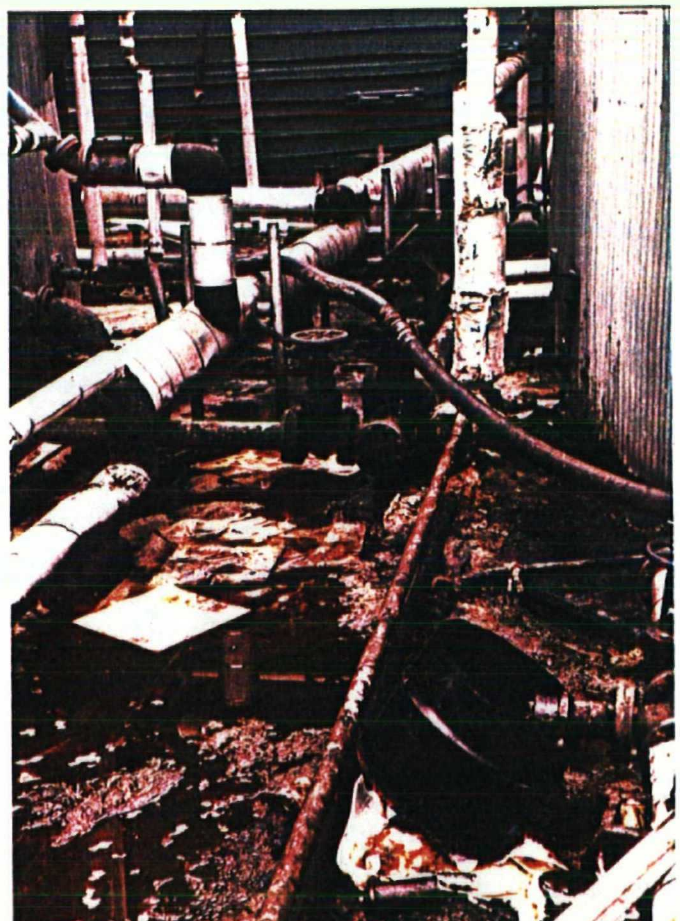


Photo No. 52 Oil Spill during A-2 Pumping. 6/11/85

Photo No. 53 Leaking Rail Car during Pumping Operation. 6/17/85

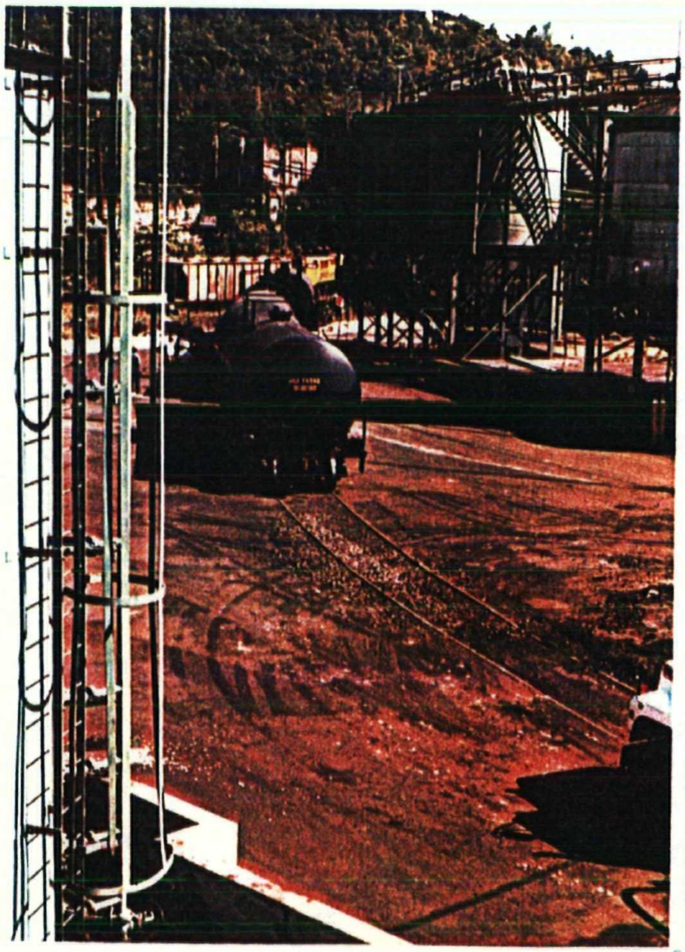


Photo No. 54 First Railcar Shipment to DuPont. 6/20/85

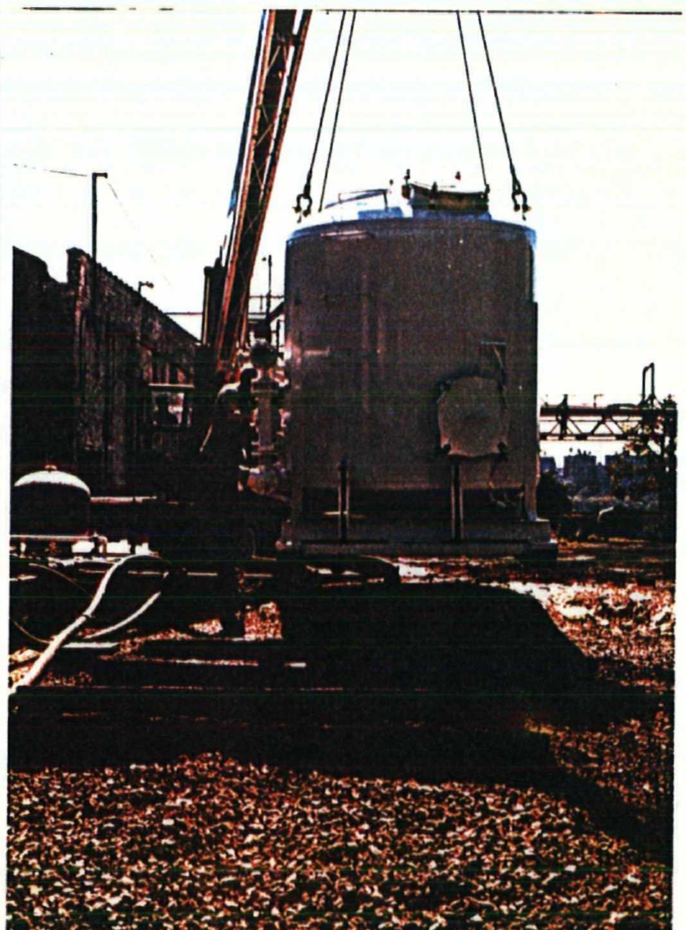


Photo No. 55 Setting New Separator Discharge Filter in Place. 6/19/85

Photo No. 56 Wetting Down Tank Tops for Fire Prevention. 6/25/85

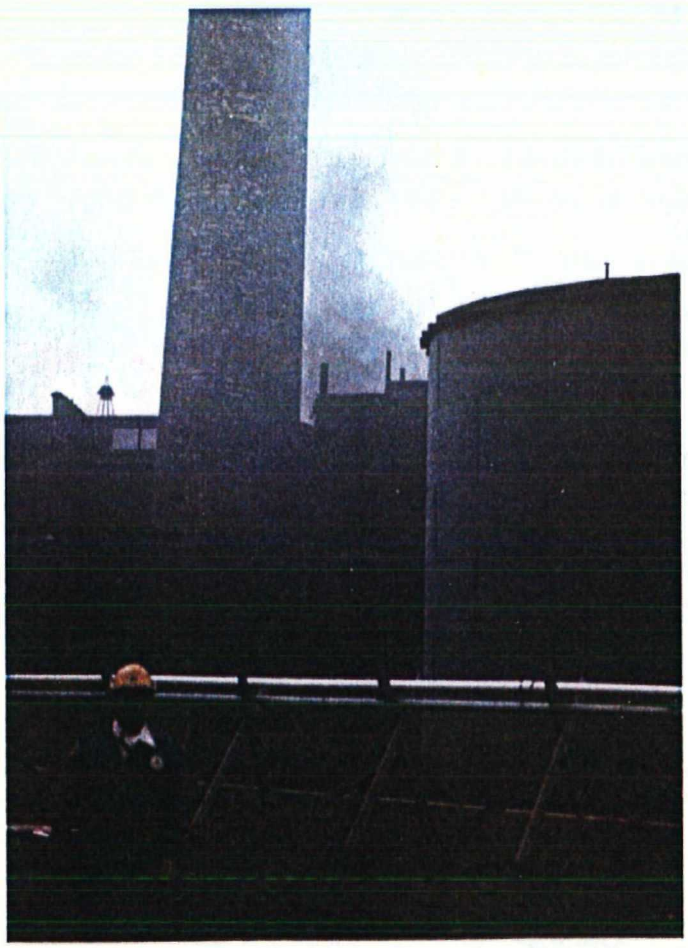


Photo No. 57 Major Fire at adjacent Spencer-Kellog facility. 6/24/85

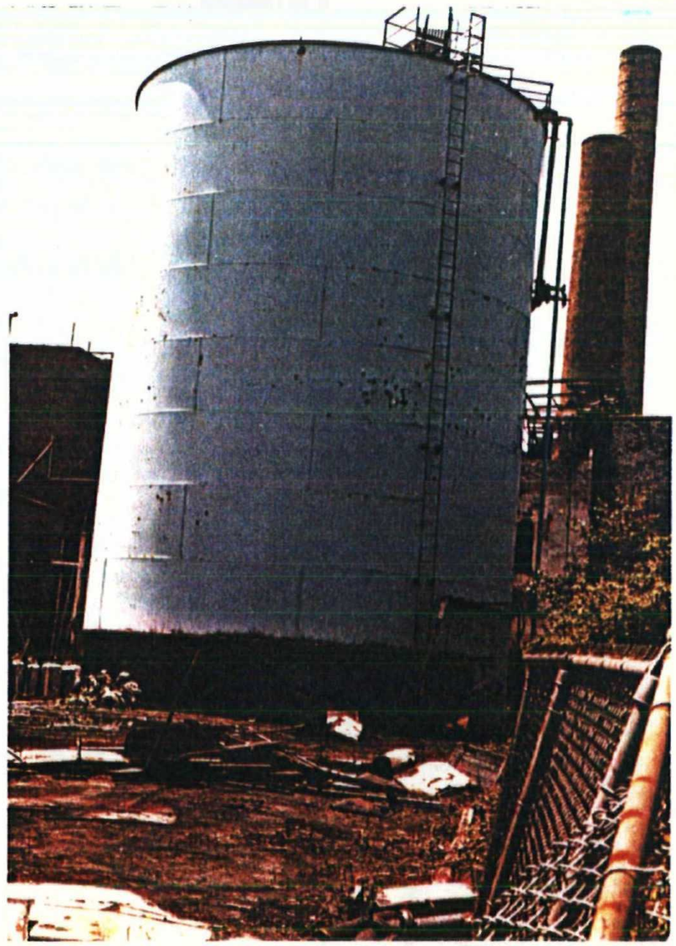


Photo No. 58 Tank Decommissioning, Spencer-Kellog. 6/19/85

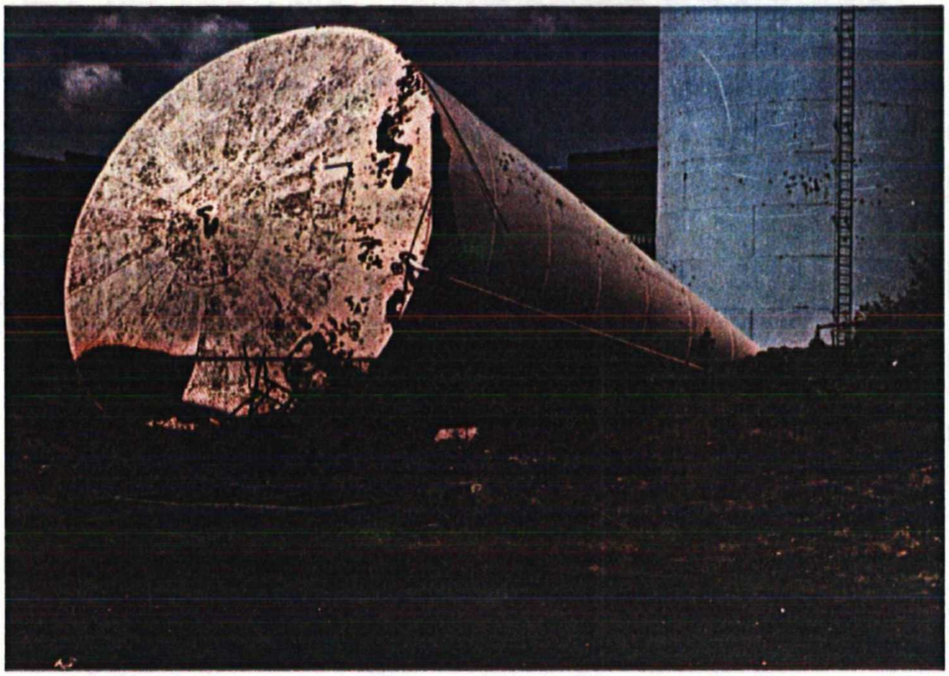


Photo No. 59 Tank Decommissioning. Spencer-Kellog.
6/14/85

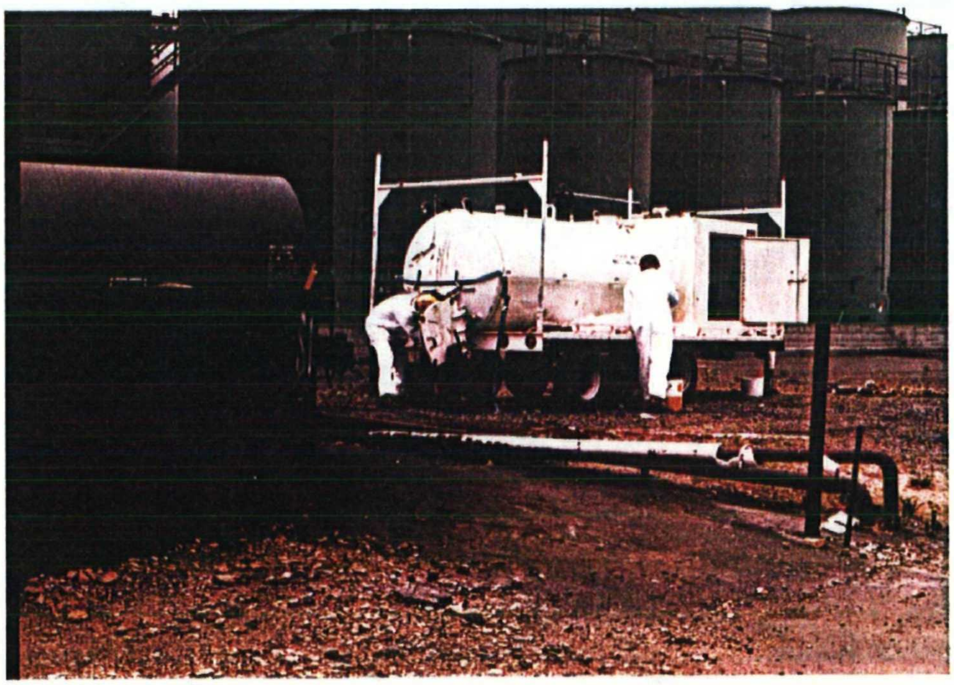


Photo No. 60 Decontaminating Vac Truck Prior
to Removal from Site. 7/10/85

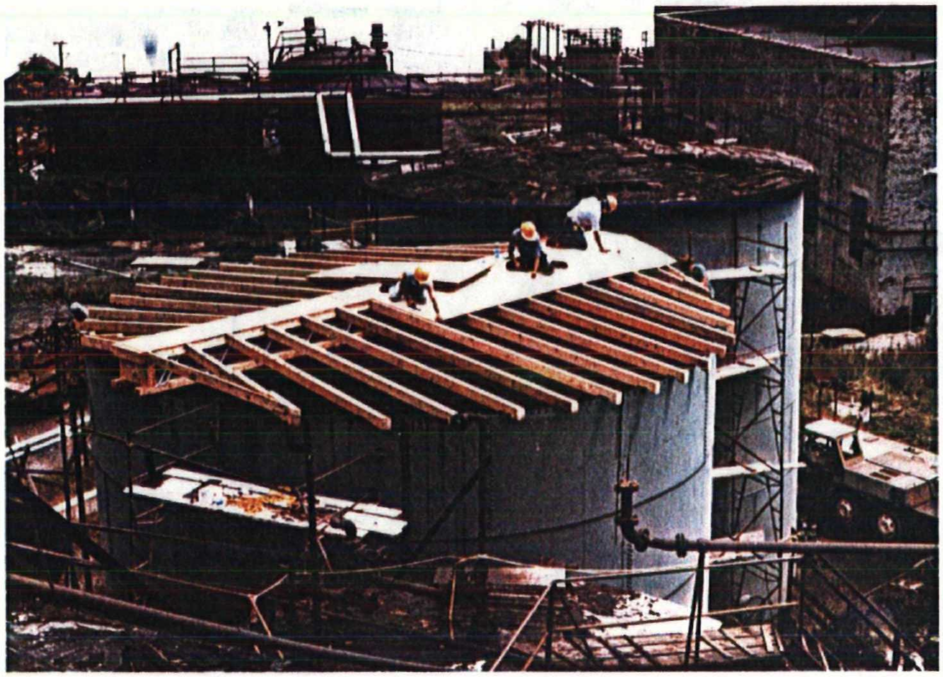


Photo No. 61 Constructing Tank D-14 Top.
7/29/85

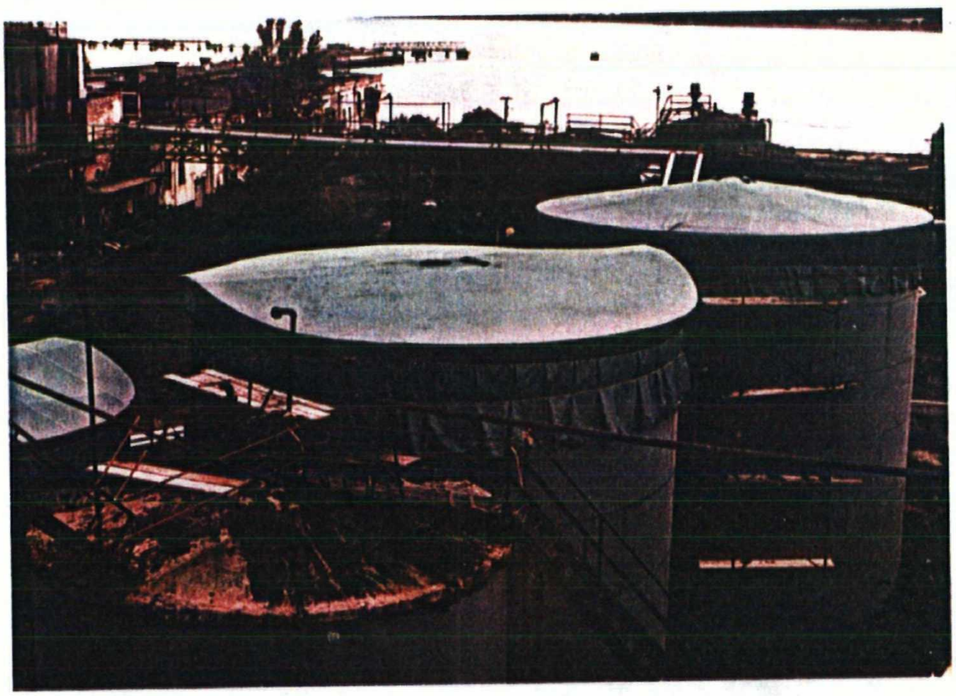


Photo No. 62 New Tank Tops with Covers,
Tanks D-12, D-14. D-15. 8/2/85

Photo No. 63 View of Site from Palisades; Railcar Loading, Tank Covering, Spencer-Kellog Tank Cutting. 8/8/85

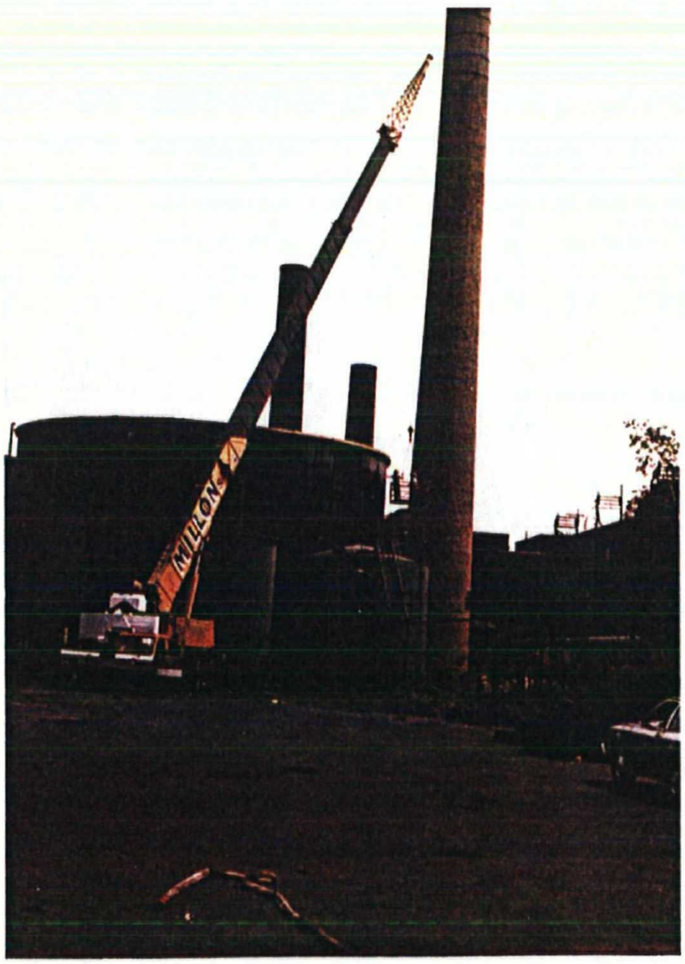


Photo No. 64 Tank D-8 Top Repair Before Covering. 8/8/85

Photo No. 65 Cutting Plates for Tank A-7 Center Pole Cap, to Support New Roof. 8/17/85

Photo No. 66 Preparing to Lift Tank A-7 Center Pole Cap into Place. 8/18/85

Photo No. 67 Removing Old Tank A-7 Roof.
8/16/85

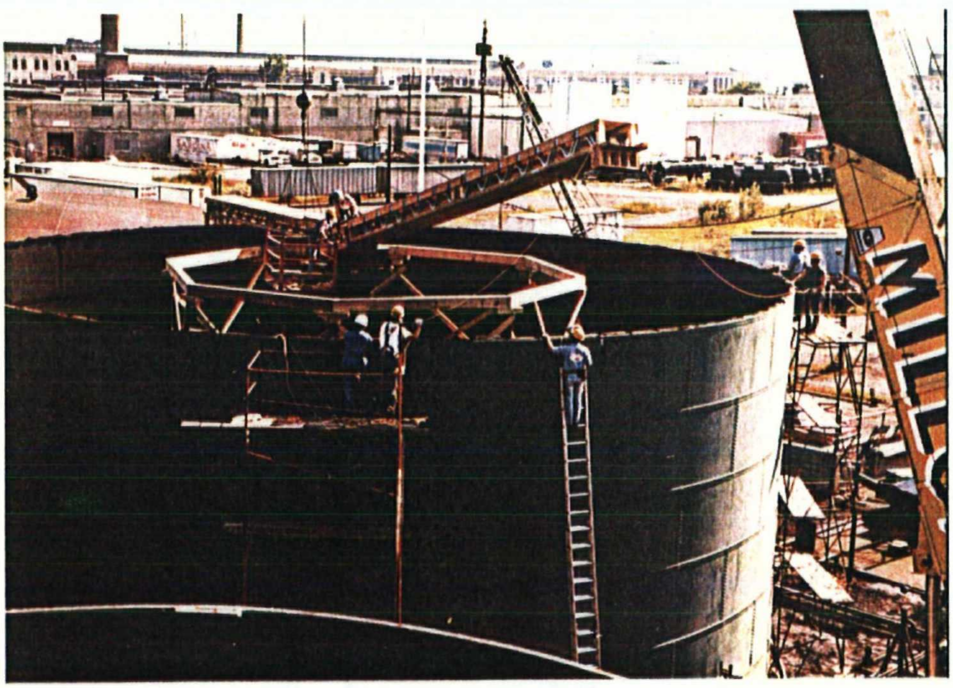


Photo No. 68 Installing Center Joist,
Tank A-7. 8/23/85

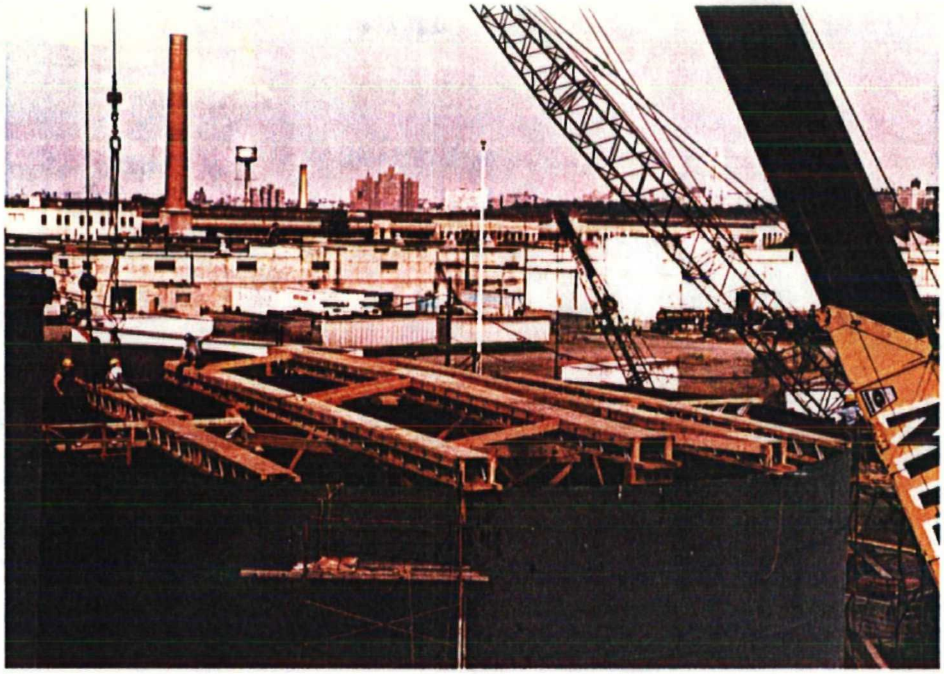


Photo No. 69 Installing Support Joists,
Tank A-7. 8/23/85

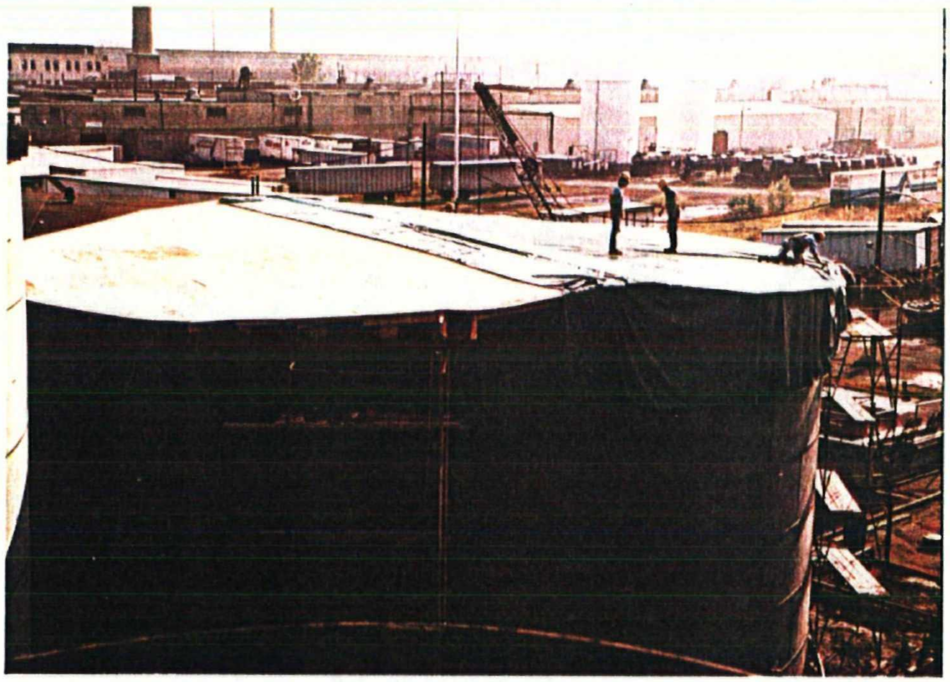


Photo No. 70 Placing Cover Over New Roof,
Tank A-7. 8/29/85

Photo No. 71 Replacing Sand in Separator Filter. 8/22/85

Photo No. 72 Derailed Tank Car Outside Site. 8/29/85

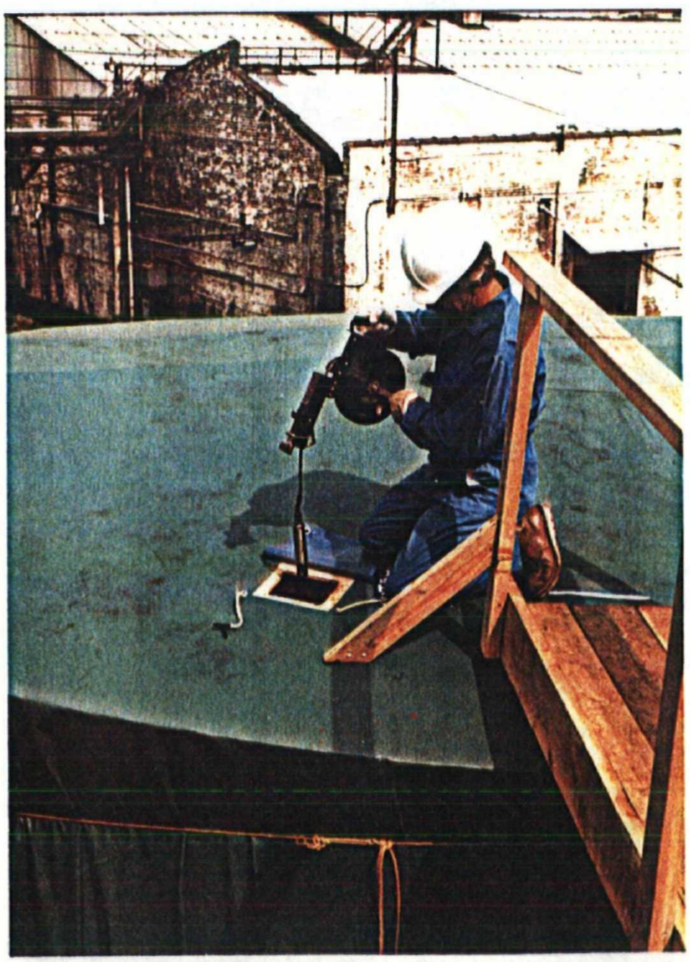


Photo No. 73 Measuring Phase Layers with Sludge Gun. 9/18/85

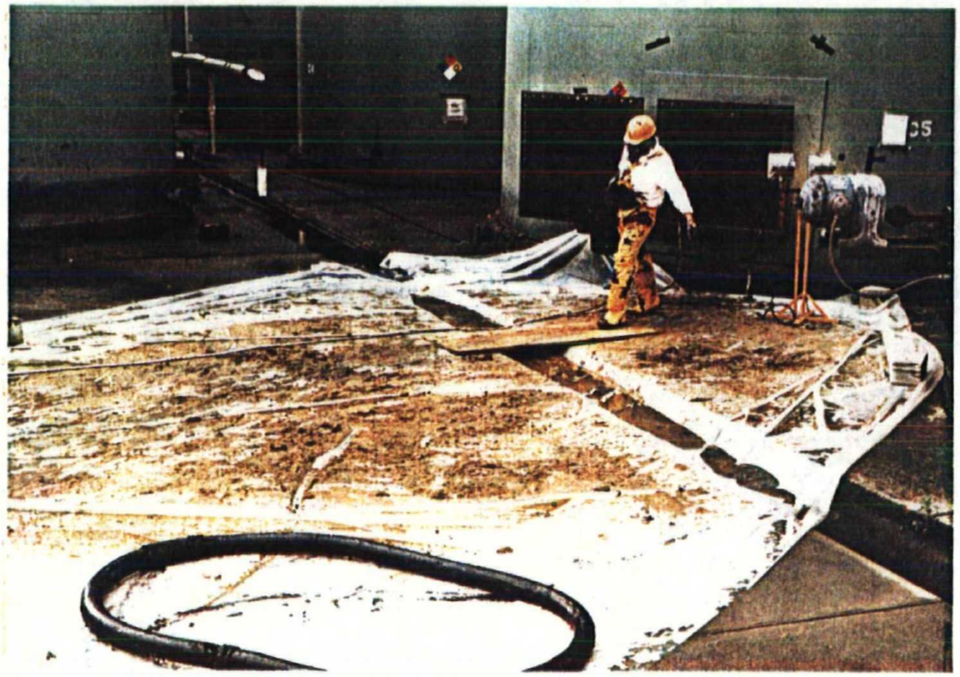


Photo No. 74 Solids Removal, Tank C-5
9/9/85

Photo No. 75 Filling Railcar with Aqueous
from Tank D-11.   9/23/85

APPENDIX B

MATERIAL AND ENVIRONMENTAL ANALYSES

1) U.S. EPA Priority Pollutant Analyses
   (ETC Corp. and Versar Laboratory)

2) ERCS Contractor Priority Pollutant Analyses

3) Physical Characteristics of Waste Oil

4) Comparison of Tank Profiling Methodologies

5) Air Monitoring Data

QUANTA RESOURCES
ETC CORPORATION
HUDSON RIVER SEDIMENT, SOUTH
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B308			
UNKNOWN	58	J,K	PPB
UNKNOWN	41000	J,K	PPB
UNKNOWN	3500	J,K	PPB
UNKNOWN	3500	J,K	PPB
UNKNOWN	3500	J,K	PPB
UNKNOWN	16000	J,K	PPB
UNKNOWN	14000	J,K	PPB
UNKNOWN	3200	J,K	PPB
UNKNOWN	16000	J,K	PPB
4-METHYL DIBENZOFURAN	4100	J,K	PPB
3-METHYL PHENANTHRENE	7800	J,K	PPB
DIMETHYL PHENANTHRENE	3700	J,K	PPB
UNKNOWN	4700	J,K	PPB
UNKNOWN	10000	J,K	PPB
UNKNOWN	7400	J,K	PPB
METHYL NAPHTHALENE	6500	J,K	PPB
1,2-DIMETHYL NAPHTHALENE	6500	J,K	PPB
METHYL FLUORENE	3200	J,K	PPB
1-METHYL PHENANTHRENE	9400	J,K	PPB
4-METHYL PHENANTHRENE	6800	J,K	PPB
4-PHENYL NAPHTHALENE	6300	J,K	PPB

KEY

- B = COMPOUND DETECTED IN BLANK; POSSIBLE BLANK CONTAMINATION
- U = COMPOUND ANALYZED FOR BUT NOT DETECTED. MINIMUM DETECTION LIMIT FOR SAMPLE GIVEN
- J = ESTIMATED VALUE
- K = COMPOUND TENTATIVELY IDENTIFIED

QUANTA RESOURCES
HUDSON RIVER SEDIMENT, SOUTH
VERSAR, INC.
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B608			
ALUMINUM	15700.0	P	PPM
ANTIMONY	[63.0]	P	PPM
ARSENIC	41.0	J,F,R	PPM
BARIUM	[89.0]	P	PPM
BERYLLIUM	1.7	U,P	PPM
CADMIUM	8.6	U,J	PPM
CALCIUM	[4780.0]	P	PPM
CHROMIUM	124.0	P	PPM
COBALT	6.9	U,P	PPM
COPPER	169.0	P	PPM
IRON	33700.0	P	PPM
LEAD	162.0	J,F,R,S	PPM
CYANIDE	5.3		PPM
MAGNESIUM	8810.0	P	PPM
MANGANESE	694.0	P	PPM
MERCURY	2.3		PPM
NICKEL	[37.0]	P	PPM
POTASSIUM	[3660.0]	P	PPM
SELENIUM	8.6	U,F,J,R	PPM
SILVER	[9.2]	J,P	PPM
SODIUM	9760.0	P	PPM
THALLIUM	17.0	U,J,R	PPM
TIN	22.0	U,J,P	PPM
VANADIUM	[45.0]	P	PPM
ZINC	338.0	P	PPM
PERCENT SOLIDS	29.0 %		
pH	6.58		
TOC	11900		PPM
PHENOLS	13.6		PPM
PETROLEUM HYDROCARBONS	3880		PPM

KEY

[ ] = VALUE GREATER OR EQUAL TO THE INSTRUMENT DETECTION LIMIT, BUT LESS THAN THE CONTRACT DETECTION LIMIT
P = ICP/FLAME AA METHOD
F = FURNACE METHOD
U = ELEMENT ANALYZED FOR; NOT DETECTED
J = ESTIMATED VALUE
S = VALUE DETERMINED BY STANDARD ADDITION METHOD
E = VALUE ESTIMATED OR NOT REPORTED DUE TO INTERFERENCES
R = SPIKE SAMPLE RECOVERY NOT WITHIN CONTRACT LIMITS

QUANTA RESOURCES
ETC CORPORATION
HUDSON RIVER SEDIMENT, NORTH
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B307			
ALPHA-BHC	7.2	U	PPB
BETA-BHC	7.2	U	PPB
DELTA-BHC	26	U	PPB
GAMMA BHC (LINDANE)	7.2	U	PPB
HEPTACHLOR	65		PPB
ALDRIN	14	U	PPB
HEPTACHLOR EPOXIDE	94	U	PPB
ENDOSULFAN I	26	U	PPB
DIELDRIN	37	U	PPB
4,4'DDE	29	U	PPB
ENDRIN	51	U	PPB
ENDOSULFAN II	29	U	PPB
4,4'DDD	7.2	U	PPB
ENDRIN ALDEHYDE	84	U	PPB
ENDOSULFAN SULFATE	180	U	PPB
4,4'DDT	14	U	PPB
METHOXYCHLOR	220	U	PPB
ENDRIN KETONE	29	U	PPB
CHLORDANE	81	U	PPB
TOXAPHENE	810	U	PPB
AROCHLOR-1016	440	U	PPB
AROCHLOR-1221	360	U	PPB
AROCHLOR-1232	41	U	PPB
AROCHLOR-1242	300	U	PPB
AROCHLOR-1248	220	U	PPB
AROCHLOR-1254	110	U	PPB
AROCHLOR-1260	120	U	PPB

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J = ESTIMATED VALUE
K = COMPOUND TENTATIVELY IDENTIFIED

QUANTA RESOURCES
ETC CORPORATION
HUDSON RIVER SEDIMENT, NORTH
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B307			
HEPTACHLOR	65		PPB
UNKNOWN	52	J,K	PPB
UNKNOWN	10000	J,K	PPB
UNKNOWN	53000	J,K	PPB
UNKNOWN	8000	J,K	PPB
UNKNOWN	6500	J,K	PPB
UNKNOWN	7000	J,K	PPB
UNKNOWN	35000	J,K	PPB
UNKNOWN	22000	J,K	PPB
UNKNOWN	18000	J,K	PPB
1 METHYL PHTHALATE	21,000	J,K	PPB
1,1 BIPHENYL	8200	J,K	PPB
1-ETHYL NAPHTHALENE	7300	J,K	PPB
1,3 DIMETHYL NAPHTHALENE	15000	J	PPB
1,7 DIMETHYL NAPHTHALENE	8600	J	PPB
1,4 DIMETHYL NAPHTHALENE	6400	J	PPB
1,4,6 TRIMETHYL NAPHTHALENE	5400	J	PPB
4-METHYL DIBENZOFURAN	8600	J	PPB
1-METHYL 9H-FLUORENE	7000	J	PPB
DIBENZOTHIOPHENE	21000	J	PPB
3 METHYL PHENANTHRENE	16000	J	PPB
2 METHYL ANTHRACENE	8800	J	PPB
DIMETHYL PHENANTHRENE	6200	J	PPB

KEY

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U = COMPOUND ANALYZED FOR BUT NOT DETECTED. MINIMUM DETECTION LIMIT FOR SAMPLE GIVEN
J = ESTIMATED VALUE
K = COMPOUND TENTATIVELY IDENTIFIED

QUANTA RESOURCES
HUDSON RIVER SEDIMENT, NORTH
VERSAR, INC.
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B607			
ALUMINUM	16000.0	P	PPM
ANTIMONY	[51.0]	P	PPM
ARSENIC	60.0	J,F,R	PPM
BARIUM	[99.0]	P	PPM
BERYLLIUM	14.0	U,P	PPM
CADMIUM	7.2	U,P,J,R	PPM
CALCIUM	[5750.0]	P	PPM
CHROMIUM	120.0	P	PPM
COBALT	[8.8]	P	PPM
COPPER	162.0	P	PPM
IRON	34200.0	P	PPM
LEAD	196.0	J,F,R,S	PPM
CYANIDE	0.66	U	PPM
MAGNESIUM	9380.0	P	PPM
MANGANESE	654.0	P	PPM
MERCURY	1.5		PPM
NICKEL	[25.0]	P	PPM
POTASSIUM	[3820.0]	P	PPM
SELENIUM	7.2	U,J,R	PPM
SILVER	[4.5]	J,P,R	PPM
SODIUM	8390.0	P	PPM
THALLIUM	14.0	U,J,P,R	PPM
TIN	19.0	U,J,P,R	PPM
VANADIUM	[45.0]	P	PPM
ZINC	364.0	P	PPM
PERCENT SOLIDS	34.9 %		
pH	6.91		
TOC	14600		PPM
PHENOLS	13.5		PPM
PETROLEUM HYDROCARBONS	4640		PPM

KEY

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QUANTA RESOURCES
ETC CORPORATION
UNDERGROUND LINE, JUNCTION BOX
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B306			
TETRACHLOROETHENE	4	U	PPB
TOLUENE	1900		PPB
CHLOROBENZENE	4	U	PPB
ETHYLBENZENE	1100		PPB
STYRENE	470		PPB
TOTAL XYLENES	3300		PPB
UNKNOWN	3300	J,K	PPB
BENZOFURAN	1300	J,K	PPB
BENZENE 1-ETHYL-2-METHYL	5900	J,K	PPB
UNKNOWN	1300	J,K	PPB
ETHYL-METHYL BENZENE	1800	J,K	PPB
ETHYL-METHYL BENZENE	4400	J,K	PPB
1-ETHENYL-2-METHYL BENZENE	4700	J,K	PPB
1-ETHENYL-4-METHYL BENZENE	7200	J,K	PPB
1-METHOXY-4(4-METHYL4PENTYL)BENZENE	2800	J,K	PPB
1-METHYL NAPHTHALENE	5500	J,K	PPB
1,1 BIPHENYL	2800	J,K	PPB
1,2-DIMETHYL NAPHTHALENE	3100	J,K	PPB
1,2-DIMETHYL NAPHTHALENE	4000	J,K	PPB
TRIMETHYL NAPHTHALENE	1400	J,K	PPB
1 METHYL-9H-FLUORENE	1400	J,K	PPB
METHYL ANTHRACENE	1710	J,K	PPB
METHYL PHENANTHRENE	1600	J,K	PPB
BENZOFURAN	1500	J,K	PPB

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QUANTA RESOURCES
ETC CORPORATION
UNDERGROUND LINE, JUNCTION BOX
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B306			
CHLOROMETHANE	4	U	PPB
BROMOMETHANE	4	U	PPB
VINYL CHLORIDE	4	U	PPB
CHLOROETHANE	4	U	PPB
METHYLENE CHLORIDE	120		PPB
ACETONE	370	B	PPB
CARBON DISULFIDE	4	U	PPB
1.1-DICHLOROETHENE	4	U	PPB
1,1-DICHLOROETHANE	4	U	PPB
TRANS-1,2-DICHLOROETHENE	4	U	PPB
CHLOROFORM	4	U	PPB
1,2-DICHLOROETHANE	4	U	PPB
2-BUTANONE	4	U	PPB
1,1,1-TRICHLOROETHANE	4	U	PPB
CARBON TETRACHLORIDE	4	U	PPB
VINYL ACETATE	4	U	PPB
BROMODICHLOROMETHANE	4	U	PPB
1,1,2,2-TETRACHLOROETHANE	4	U	PPB
1,2-DICHLOROPROPANE	4	U	PPB
TRANS-1,3-DICHLOROPROPENE	4	U	PPB
TRICHLOROETHENE	4	U	PPB
DIBROMOCHLOROMETHANE	4	U	PPB
1,1,2-TRICHLOROETHANE	4	U	PPB
BENZENE	950		PPB
CIS-1,3-DICHLOROPROPENE	4	U	PPB
2-CHLOROETHYLVINYLETHER	4	U	PPB
BROMOFORM	4	U	PPB
2-HEXANONE	4	U	PPB
4-METHYL-2-PENTANONE	4	U	PPB

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QUANTA RESOURCES
UNDERGROUND LINE, JUNCTION BOX
VERSAR, INC.
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B606			
ALUMINUM	5320.0	P	PPB
ANTIMONY	93.0	P	PPB
ARSENIC	2140.0	F	PPB
BARIUM	[39.0]	P	PPB
BERYLLIUM	1.0	U,P	PPB
CADMIUM	5.0	U,P	PPB
CALCIUM	94800.0	P	PPB
CHROMIUM	11.0	P	PPB
COBALT	[13.0]	P	PPB
COPPER	114.0	P	PPB
IRON	51500.0	P	PPB
LEAD	94.0	F,S	PPB
CYANIDE	40.0		PPB
MAGNESIUM	18700.0	P	PPB
MANGANESE	1610.0	P	PPB
MERCURY	0.2	U	PPB
NICKEL	[33.0]	P	PPB
POTASSIUM	5510.0	J,P	PPB
VANADIUM	[22.0]	P	PPB
ZINC	943.0	P	PPB
CHROMIUM,HEX	20.0	U	PPB
pH	6.31		
CONDUCTIVITY	950.0		UMHO/CM
SULFATE	383.0		PPM
TOC	31.8		PPM
PHENOLS	0.97		PPM
PETROLEUM HYDROCARBONS	104.0		PPM

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QUANTA RESOURCES
ETC CORPORATION
HUDSON RIVER, SUBSURFACE
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B305			
CHLOROMETHANE	4	U	PPB
BROMOMETHANE	4	U	PPB
VINYL CHLORIDE	4	U	PPB
CHLOROETHANE	4	U	PPB
METHYLENE CHLORIDE	4	U	PPB
ACETONE	10	B	PPB
CARBON DISULFIDE	4	U	PPB
1.1-DICHLOROETHENE	4	U	PPB
1,1-DICHLOROETHANE	4	U	PPB
TRANS-1,2-DICHLOROETHENE	4	U	PPB
CHLOROFORM	4	U	PPB
1,2-DICHLOROETHANE	4	U	PPB
2-BUTANONE	4	U	PPB
1,1,1-TRICHLOROETHANE	4	U	PPB
CARBON TETRACHLORIDE	4	U	PPB
VINYL ACETATE	4	U	PPB
BROMODICHLOROMETHANE	4	U	PPB
1,1,2,2-TETRACHLOROETHANE	4	U	PPB
1,2-DICHLOROPROPANE	4	U	PPB
TRANS-1,3-DICHLOROPROPENE	4	U	PPB
TRICHLOROETHENE	4	U	PPB
DIBROMOCHLOROMETHANE	4	U	PPB
1,1,2-TRICHLOROETHANE	4	U	PPB
BENZENE	4	U	PPB
CIS-1,3-DICHLOROPROPENE	4	U	PPB
2-CHLOROETHYLVINYLETHER	4	U	PPB
BROMOFORM	4	U	PPB
2-HEXANONE	4	U	PPB
4-METHYL-2-PENTANONE	4	U	PPB
TETRACHLOROETHENE	4	U	PPB
TOLUENE	4	U	PPB
CHLOROBENZENE	4	U	PPB
ETHYLBENZENE	4	U	PPB
STYRENE	4	U	PPB
TOTAL XYLENES	4	U	PPB
UNKNOWN	13	J,K	PPB
UNKNOWN	45	J,K	PPB
BENZENE, 1-PROPYNYL	1200	J,K	PPB
BENZENE 1,2,3 TRIMETHYL	390	J,K	PPB

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QUANTA RESOURCES
HUDSON RIVER, SUBSURFACE
VERSAR, INC.
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B605			
ALUMINUM	343.0	P	PPB
ANTIMONY	[31.0]	P	PPB
ARSENIC	10.0	U,F	PPB
BARIUM	[18.0]	P	PPB
BERYLLIUM	10.0	U,P	PPB
CADMIUM	5.0	U,P	PPB
CALCIUM	109000.0	P	PPB
CHROMIUM	[4.2]	P	PPB
COBALT	4.0	U,P	PPB
COPPER	[8.9]	P	PPB
IRON	496.0	P	PPB
LEAD	15.0	U,F,E	PPB
CYANIDE	5.5	U	PPB
MAGNESIUM	346000.0	P	PPB
MANGANESE	28.0	P	PPB
MERCURY	0.2	U	PPB
NICKEL	10.0	U,P	PPB
POTASSIUM	120000.0	J,P	PPB
VANADIUM	3.0	U,P	PPB
ZINC	3.0	U,P	PPB
CHROMIUM,HEX	20.0	U	PPB
pH	7.76		
CONDUCTIVITY	15800.0		UMHO/CM
SULFATE	915.0		PPM
TOC	2.37		PPM
PHENOLS	0.05		PPM
PETROLEUM HYDROCARBONS	< 1.6		PPM

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QUANTA RESOURCES
ETC CORPORATION
HUDSON RIVER, SURFACE,NORTH
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B304			
CHLOROMETHANE	4	U	PPB
BROMOMETHANE	4	U	PPB
VINYL CHLORIDE	4	U	PPB
CHLOROETHANE	4	U	PPB
METHYLENE CHLORIDE	5.2	B	PPB
ACETONE	28	B	PPB
CARBON DISULFIDE	4	U	PPB
1.1-DICHLOROETHENE	4	U	PPB
1,1-DICHLOROETHANE	4	U	PPB
TRANS-1,2-DICHLOROETHENE	4	U	PPB
CHLOROFORM	6.9		PPB
1,2-DICHLOROETHANE	4	U	PPB
2-BUTANONE	4	U	PPB
1,1,1-TRICHLOROETHANE	4	U	PPB
CARBON TETRACHLORIDE	4	U	PPB
VINYL ACETATE	4	U	PPB
BROMODICHLOROMETHANE	4	U	PPB
1,1,2,2-TETRACHLOROETHANE	4	U	PPB
1,2-DICHLOROPROPANE	4	U	PPB
TRANS-1,3-DICHLOROPROPENE	4	U	PPB
TRICHLOROETHENE	4	U	PPB
DIBROMOCHLOROMETHANE	4	U	PPB
1,1,2-TRICHLOROETHANE	4	U	PPB
BENZENE	180		PPB
CIS-1,3-DICHLOROPROPENE	4	U	PPB
2-CHLOROETHYLVINYLETHER	4	U	PPB
BROMOFORM	4	U	PPB
2-HEXANONE	4	U	PPB
4-METHYL-2-PENTANONE	4	U	PPB

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QUANTA RESOURCES
ETC CORPORATION
HUDSON RIVER, SURFACE,NORTH
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B304			
TETRACHLOROETHENE	4	U	PPB
TOLUENE	340		PPB
CHLOROBENZENE	4	U	PPB
ETHYLBENZENE	180		PPB
STYRENE	110		PPB
TOTAL XYLENES	3300		PPB
UNKNOWN	700	J,K	PPB
BENZO[b]TRIOPHENE	82	J,K	PPB
BENZOFURAN	480	J,K	PPB
BENZENE 2-PROPENYL	1700	J,K	PPB
BENZENE 1-ETHYL-2-METHYL	60	J,K	PPB
UNKNOWN	765	J,K	PPB
2-CYCLOHEXANE	130	J,K	PPB
TRIMETHYL-PHENOL	53	J,K	PPB
2-ETHYL-5-METHYL-PHENOL	63	J,K	PPB
2-METHYL-QUINOLINE	110	J,K	PPB
4H-CYCLOPENTA PHENANTHRENE	186	J,K	PPB
11H-BENZOFLUORENE	450	J,K	PPB

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QUANTA RESOURCES
HUDSON RIVER, SURFACE, NORTH
VERSAR, INC.
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B604			
ALUMINUM	4270.0	P	PPB
ANTIMONY	66.0	P	PPB
ARSENIC	480.0	F,S	PPB
BARIUM	[50.0]	P	PPB
BERYLLIUM	1.0	U,P	PPB
CADMIUM	5.0	U,P	PPB
CALCIUM	85200.0	P	PPB
CHROMIUM	31.0	P	PPB
COBALT	[6.1]	P	PPB
COPPER	53.0	P	PPB
IRON	25300.0	P	PPB
LEAD	43.0	F	PPB
CYANIDE	18.0		PPB
MAGNESIUM	139000.0	P	PPB
MANGANESE	869.0	P	PPB
MERCURY	0.6		PPB
NICKEL	[28.0]	P	PPB
POTASSIUM	41600.0	J,P	PPB
VANADIUM	[14.0]	P	PPB
ZINC	157.0	P	PPB
CHROMIUM,HEX	20.0	U	PPB
pH	6.59		
CONDUCTIVITY	7780.0		UMHO/CM
SULFATE	484.0		PPM
TOC	35.6		PPM
PHENOLS	0.56		PPM
PETROLEUM HYDROCARBONS	16.9		PPM

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QUANTA RESOURCES
ETC CORPORATION
HUDSON RIVER, SURFACE, SOUTH
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B303			
CHLOROMETHANE	4	U	PPB
BROMOMETHANE	4	U	PPB
VINYL CHLORIDE	4	U	PPB
CHLOROETHANE	4	U	PPB
METHYLENE CHLORIDE	4	U	PPB
ACETONE	21	B	PPB
CARBON DISULFIDE	4	U	PPB
1.1-DICHLOROETHENE	4	U	PPB
1,1-DICHLOROETHANE	4	U	PPB
TRANS-1,2-DICHLOROETHENE	4	U	PPB
CHLOROFORM	4	U	PPB
1,2-DICHLOROETHANE	4	U	PPB
2-BUTANONE	4	U	PPB
1,1,1-TRICHLOROETHANE	4	U	PPB
CARBON TETRACHLORIDE	4	U	PPB
VINYL ACETATE	4	U	PPB
BROMODICHLOROMETHANE	4	U	PPB
1,1,2,2-TETRACHLOROETHANE	4	U	PPB
1,2-DICHLOROPROPANE	4	U	PPB
TRANS-1,3-DICHLOROPROPENE	4	U	PPB
TRICHLOROETHENE	4	U	PPB
DIBROMOCHLOROMETHANE	4	U	PPB
1,1,2-TRICHLOROETHANE	4	U	PPB
BENZENE	4	U	PPB
CIS-1,3-DICHLOROPROPENE	4	U	PPB
2-CHLOROETHYLVINYLETHER	4	U	PPB
BROMOFORM	4	U	PPB
2-HEXANONE	4	U	PPB
4-METHYL-2-PENTANONE	4	U	PPB
TETRACHLOROETHENE	4	U	PPB
TOLUENE	4	U	PPB
CHLOROBENZENE	4	U	PPB
ETHYLBENZENE	4	U	PPB
STYRENE	4	U	PPB
TOTAL XYLENES	99		PPB
DIMETYL-2-PENTENE	590	J,K	PPB
UNKNOWN	58	J,K	PPB
BENZENE ETHANOL	200	J,K	PPB
BENZO[b]TRIOPHENE	30	J,K	PPB

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QUANTA RESOURCES
HUDSON RIVER, SURFACE, SOUTH
VERSAR, INC.
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B603			
ALUMINUM	480.0	P	PPB
ANTIMONY	24.0	U,P	PPB
ARSENIC	10.0	U,F	PPB
BARIUM	[38.0]	P	PPB
BERYLLIUM	1.0	U,P	PPB
CADMIUM	5.0	U,P	PPB
CALCIUM	103000.0	P	PPB
CHROMIUM	[4.1]	P	PPB
COBALT	4.0	U,P	PPB
COPPER	[12.0]	P	PPB
IRON	1530.0	P	PPB
LEAD	25.0	U,F	PPB
CYANIDE	12.0		PPB
MAGNESIUM	307000.0	P	PPB
MANGANESE	115.0	P	PPB
MERCURY	0.2	U	PPB
NICKEL	[17.0]	P	PPB
POTASSIUM	101000.0	J,P	PPB
VANADIUM	3.0	U,P	PPB
ZINC	[11.0]	P	PPB
CHROMIUM,HEX	20.0	U	PPB
pH	7.19		
CONDUCTIVITY	15600		UMHO/CM
SULFATE	875.0		PPM
TOC	8.49		PPM
PHENOLS	0.24		PPM
PETROLEUM HYDROCARBONS	34.1		PPM

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QUANTA RESOURCES
ETC CORPORATION
BLANK
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B302			
CHLOROMETHANE	4	U	PPB
BROMOMETHANE	4	U	PPB
VINYL CHLORIDE	4	U	PPB
CHLOROETHANE	4	U	PPB
METHYLENE CHLORIDE	4	U	PPB
ACETONE	14	B	PPB
CARBON DISULFIDE	4	U	PPB
1.1-DICHLOROETHENE	4	U	PPB
1,1-DICHLOROETHANE	4	U	PPB
TRANS-1,2-DICHLOROETHENE	4	U	PPB
CHLOROFORM	4	U	PPB
1,2-DICHLOROETHANE	4	U	PPB
2-BUTANONE	4	U	PPB
1,1,1-TRICHLOROETHANE	4	U	PPB
CARBON TETRACHLORIDE	4	U	PPB
VINYL ACETATE	4	U	PPB
BROMODICHLOROMETHANE	4	U	PPB
1,1,2,2-TETRACHLOROETHANE	4	U	PPB
1,2-DICHLOROPROPANE	4	U	PPB
TRANS-1,3-DICHLOROPROPENE	4	U	PPB
TRICHLOROETHENE	4	U	PPB
DIBROMOCHLOROMETHANE	4	U	PPB
1,1,2-TRICHLOROETHANE	4	U	PPB
BENZENE	4	U	PPB
CIS-1,3-DICHLOROPROPENE	4	U	PPB
2-CHLOROETHYLVINYLETHER	4	U	PPB
BROMOFORM	4	U	PPB
2-HEXANONE	4	U	PPB
4-METHYL-2-PENTANONE	4	U	PPB
TETRACHLOROETHENE	4	U	PPB
TOLUENE	4	U	PPB
CHLOROBENZENE	4	U	PPB
ETHYLBENZENE	4	U	PPB
STYRENE	4	U	PPB
TOTAL XYLENES	4	U	PPB
DIMETYL-2-PENTENE	350	J,K	PPB
UNKNOWN	99	J,K	PPB

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QUANTA RESOURCES
BLANK
VERSAR, INC.
APRIL 24, 1985

PARAMETER	CONCENTRATION		UNITS
** LAB ID #: B602			
ALUMINUM	18.0	U,P	PPB
ANTIMONY	24.0	U,P	PPB
ARSENIC	10.0	U,F	PPB
BARIUM	[2.9]	P	PPB
BERYLLIUM	1.0	U,P	PPB
CADMIUM	5.0	U,P	PPB
CALCIUM	[8.3]	P	PPB
CHROMIUM	[3.4]	P	PPB
COBALT	4.0	U,P	PPB
COPPER	[4.3]	P	PPB
IRON	[21.0]	P	PPB
LEAD	5.0	U,F	PPB
CYANIDE	[5.6]		PPB
MAGNESIUM	[30.0]	P	PPB
MANGANESE	2.0	U,P	PPB
MERCURY	0.2	U	PPB
NICKEL	10.0	U,P	PPB
POTASSIUM	400.0	U,J,P	PPB
VANADIUM	3.0	U,P	PPB
ZINC	[12.0]	P	PPB
pH	5.81		
CONDUCTIVITY	10.0		UMHO/CM
SULFATE	< 1.0		PPM
TOC	0.44		PPM
PHENOLS	0.06		PPM
PETROLEUM HYDROCARBONS	38.2		PPM

KEY

[ ] = VALUE GREATER OR EQUAL TO THE INSTRUMENT DETECTION LIMIT, BUT LESS THAN THE CONTRACT DETECTION LIMIT
P = ICP/FLAME AA METHOD
F = FURNACE METHOD
U = ELEMENT ANALYZED FOR; NOT DETECTED
J = ESTIMATED VALUE
S = VALUE DETERMINED BY STANDARD ADDITION METHOD
E = VALUE ESTIMATED OR NOT REPORTED DUE TO INTERFERENCES
R = SPIKE SAMPLE RECOVERY NOT WITHIN CONTRACT LIMITS

WESTON·SPER
Region II
300 McGaw Drive - 2nd Floor, Raritan Center
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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-6669

TO: John Witkowski, U.S.EPA

FROM: John Brzozowski, TAT II

SUBJECT: Priority Pollutant Laboratory Analyses,
Quanta Resources Site

DATE: September 23, 1985

Attached are the priority pollutant analyses conducted by S-R Analytical on aqueous, oily, sludge, and soil material from the Quanta site during 1985 to date.

CONTENTS

TANK	PHASE	DATE
A-1	Aqueous	6/7/85
A-3	Aqueous	6/3/85
A-4	Aqueous	6/3/85
A-6	Aqueous	6/7/85
A-7	Aqueous	6/7/85
C-5	Sludge	6/24/85
D-8	Aqueous	6/7/85
D-10	Sludge	6/7/85
D-11	Sludge	6/7/85
D-26	Oily	5/9/85
D-27	Oily	5/9/85
S-1	Sludge	6/24/85
Separator influent (A)		4/30/85
Separator effluent (A)		5/2/85
Separator effluent (A)		5/22/85
Subsurface soil		4/15/85
Subsurface aqueous		4/15/85

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-1					
PHENOL	11424-3	A		8.2	PPM
2-CHLOROPHENOL	11424-3	A		<0.01	PPM
2-NITROPHENOL	11424-3	A		<0.01	PPM
2,4-DIMETHYLPHENOL	11424-3	A		0.96	PPM
2,4-DICHLOROPHENOL	11424-3	A		<0.01	PPM
4-CHLORO-3-METHYL-PHENOL	11424-3	A		0.14	PPM
2,4,6-TRICHLOROPHENOL	11424-3	A		<0.01	PPM
2,4-DINITROPHENOL	11424-3	A		<0.1	PPM
4-NITROPHENOL	11424-3	A		<0.01	PPM
2-METHYL-4,6-DINITROPHENOL	11424-3	A		<0.1	PPM
PENTACHLOROPHENOL	11424-3	A		<0.01	PPM
BIS(CHLOROETHYL) ETHER	11424-3	A		<0.002	PPM
1,2-DICHLOROBENZENE	11424-3	A		<0.002	PPM
1,4-DICHLOROBENZENE	11424-3	A		<0.002	PPM
1,3-DICHLOROBENZENE	11424-3	A		<0.002	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11424-3	A		<0.002	PPM
N-NITROSODIPROPYL AMINE	11424-3	A		<0.002	PPM
HEXACHLOROETHANE	11424-3	A		<0.002	PPM
NITROBENZENE	11424-3	A		<0.002	PPM
ISOPHORONE	11424-3	A		0.51	PPM
BIS(2-CHLOROETHOXY) METHANE	11424-3	A		<0.002	PPM
1,2,4-TRICHLOROBENZENE	11424-3	A		<0.002	PPM
NAPHTHALENE	11424-3	A		0.80	PPM
HEXACHLOROBUTADIENE	11424-3	A		<0.002	PPM
HEXACHLOROCYCLOPENTADIENE	11424-3	A		<0.002	PPM
2-CHLORONAPHTHALENE	11424-3	A		<0.002	PPM
DIMETHYL PHTHALATE	11424-3	A		<0.002	PPM
2,6-DINITROTOLUENE	11424-3	A		<0.002	PPM
ACENAPHTHYLENE	11424-3	A		<0.002	PPM
ACENAPHTHENE	11424-3	A		0.037	PPM
2,4-DINITROTOLUENE	11424-3	A		<0.002	PPM
DIETHYL PHTHALATE	11424-3	A		<0.002	PPM
N-NITROSODIMETHYL AMINE	11424-3	A		<0.002	PPM
4-CHLOROPHENYLPHENYL ETHER	11424-3	A		<0.002	PPM
FLUORENE	11424-3	A		0.035	PPM
AZOBENZENE	11424-3	A		<0.002	PPM
N-NITROSODIPHENYL AMINE	11424-3	A		<0.002	PPM
4-BROMOPHENYLPHENYL ETHER	11424-3	A		<0.002	PPM
HEXACHLOROBENZENE	11424-3	A		<0.002	PPM
PHENANTHRENE	11424-3	A		0.055	PPM
ANTHRACENE	11424-3	A		<0.002	PPM
DIBUTYL PHTHALATE	11424-3	A		0.014	PPM
FLUORANTHENE	11424-3	A		<0.002	PPM
BENZIDINE	11424-3	A		<0.06	PPM
PYRENE	11424-3	A		<0.002	PPM
BUTYLBENZYL PHTHALATE	11424-3	A		<0.002	PPM
3,3'-DICHLOROBENZIDINE	11424-3	A		<0.06	PPM
BENZO (A) ANTHRACENE	11424-3	A		<0.002	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-1					
CHRYSENE	11424-3	A		<0.002	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11424-3	A		<0.002	PPM
DIOCTYL PHTHALATE	11424-3	A		<0.002	PPM
BENZO (K) FLUORANTHENE	11424-3	A		<0.002	PPM
BENZO (B) FLUORANTHENE	11424-3	A		<0.002	PPM
BENZO (A) PYRENE	11424-3	A		<0.002	PPM
INDENO (1,2,3-C,D) PYRENE	11424-3	A		<0.04	PPM
DIBENZO (A,H) ANTHRACENE	11424-3	A		<0.04	PPM
BENZO (GHI) PERYLENE	11424-3	A		<0.04	PPM
CHLOROMETHANE	11424-3	A		<0.1	PPM
BROMOMETHANE	11424-3	A		<0.1	PPM
VINYL CHLORIDE	11424-3	A		<0.1	PPM
CHLOROETHANE	11424-3	A		<0.1	PPM
METHYLENE CHLORIDE	11424-3	A		7.6	PPM
1,1-DICHLOROETHENE	11424-3	A		<0.1	PPM
1,1-DICHLOROETHANE	11424-3	A		0.98	PPM
TRANS-1,2-DICHLOROETHENE	11424-3	A		6.3	PPM
CHLOROFORM	11424-3	A		<0.1	PPM
1,2-DICHLOROETHANE	11424-3	A		<0.1	PPM
1,1,1-TRICHLOROETHANE	11424-3	A		1.6	PPM
CARBON TETRACHLORIDE	11424-3	A		<0.1	PPM
BROMODICHLOROMETHANE	11424-3	A		<0.1	PPM
1,2-DICHLOROPROPANE	11424-3	A		<0.1	PPM
TRANS-1,3-DICHLOROPROPENE	11424-3	A		<0.1	PPM
TRICHLOROETHENE	11424-3	A		<0.1	PPM
BENZENE	11424-3	A		0.66	PPM
DIBROMOCHLOROMETHANE	11424-3	A		<0.1	PPM
1,1,2-TRICHLOROETHANE	11424-3	A		<0.1	PPM
CIS-1,3-DICHLOROPROPENE	11424-3	A		<0.1	PPM
2-CHLOROETHYL VINYL ETHER	11424-3	A		<0.1	PPM
BROMOFORM	11424-3	A		<0.1	PPM
1,1,2,2-TETRACHLOROETHANE	11424-3	A		<0.1	PPM
TETRACHLOROETHENE	11424-3	A		<0.1	PPM
TOLUENE	11424-3	A		1.4	PPM
CHLOROBENZENE	11424-3	A		<0.1	PPM
ETHYL BENZENE	11424-3	A		<0.1	PPM
DICHLORODIFLUOROMETHANE	11424-3	A		<1	PPM
TRICHLOROFLUOROMETHANE	11424-3	A		<0.1	PPM
ALDRIN	11424-3	A		<0.005	PPM
ALPHA BHC	11424-3	A		<0.005	PPM
BETA BHC	11424-3	A		<0.025	PPM
GAMMA BHC	11424-3	A		<0.01	PPM
DELTA BHC	11424-3	A		<0.01	PPM
CHLORDANE	11424-3	A		<0.01	PPM
DIELDRIN	11424-3	A		<0.025	PPM
P,P'-DDE	11424-3	A		<0.025	PPM
P,P'-DDT	11424-3	A		<0.025	PPM
P,P'DDD	11424-3	A		<0.025	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-1					
ENDOSULFAN I	11424-3	A		<0.01	PPM
ENDOSULFAN II	11424-3	A		<0.01	PPM
ENDOSULFAN SULFATE	11424-3	A		<0.01	PPM
ENDRIN	11424-3	A		<0.025	PPM
ENDRIN ALDEHYDE	11424-3	A		<0.01	PPM
HEPTACHLOR	11424-3	A		<0.025	PPM
HEPTACHLOR EPOXIDE	11424-3	A		<0.025	PPM
TOXAPHENE	11424-3	A		<0.01	PPM
PCB'S, AROCLOR 1254	11424-3	A		<0.01	PPM
ARSENIC	11424-3	A		<0.5	PPM
CADMIUM	11424-3	A		<0.1	PPM
CHROMIUM	11424-3	A		0.16	PPM
LEAD	11424-3	A		0.76	PPM
MERCURY	11424-3	A		<0.2	PPM
SELENIUM	11424-3	A		<0.2	PPM
SILVER	11424-3	A		<0.5	PPM
CYANIDE	11424-3	A		<1	PPM
ANTIMONY	11424-3	A		<0.05	PPM
BERYLLIUM	11424-3	A		0.027	PPM
COPPER	11424-3	A		0.16	PPM
NICKEL	11424-3	A		0.23	PPM
THALLIUM	11424-3	A		<10	PPM
ZINC	11424-3	A		18	PPM
PHENOLICS, AS PHENOL	11424-3	A		11	PPM
TOTAL ORGANIC CARBON	11424-3	A		410	PPM
OIL & GREASE	11424-3	A		76	PPM
CHLOROMETHANE	11424-3	A	D	<0.1	PPM
BROMOMETHANE	11424-3	A	D	<0.1	PPM
VINYL CHLORIDE	11424-3	A	D	<0.1	PPM
CHLOROETHANE	11424-3	A	D	<0.1	PPM
METHYLENE CHLORIDE	11424-3	A	D	7.8	PPM
1,1-DICHLOROETHENE	11424-3	A	D	<0.1	PPM
1,1-DICHLOROETHANE	11424-3	A	D	1.0	PPM
TRANS-1,2-DICHLOROETHENE	11424-3	A	D	6.5	PPM
CHLOROFORM	11424-3	A	D	<0.1	PPM
1,2-DICHLOROETHANE	11424-3	A	D	<0.1	PPM
1,1,1-TRICHLOROETHANE	11424-3	A	D	1.6	PPM
CARBON TETRACHLORIDE	11424-3	A	D	<0.1	PPM
BROMODICHLOROMETHANE	11424-3	A	D	<0.1	PPM
1,2-DICHLOROPROPANE	11424-3	A	D	<0.1	PPM
TRANS-1,3-DICHLOROPROPENE	11424-3	A	D	<0.1	PPM
TRICHLOROETHENE	11424-3	A	D	<0.1	PPM
BENZENE	11424-3	A	D	0.7	PPM
DIBROMOCHLOROMETHANE	11424-3	A	D	<0.1	PPM
1,1,2-TRICHLOROETHANE	11424-3	A	D	<0.1	PPM
CIS-1,3-DICHLOROPROPENE	11424-3	A	D	<0.1	PPM
2-CHLOROETHYL VINYL ETHER	11424-3	A	D	<0.1	PPM
BROMOFORM	11424-3	A	D	<0.1	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-1					
1,1,2,2-TETRACHLOROETHANE	11424-3	A	D	<0.1	PPM
TETRACHLOROETHENE	11424-3	A	D	<0.1	PPM
TOLUENE	11424-3	A	D	1.4	PPM
CHLOROBENZENE	11424-3	A	D	<0.1	PPM
ETHYL BENZENE	11424-3	A	D	<0.1	PPM
DICHLORODIFLUOROMETHANE	11424-3	A	D	<1	PPM
TRICHLOROFLUOROMETHANE	11424-3	A	D	<0.1	PPM
ALDRIN	11424-3	A	D	<0.005	PPM
ALPHA BHC	11424-3	A	D	<0.005	PPM
BETA BHC	11424-3	A	D	<0.025	PPM
GAMMA BHC	11424-3	A	D	<0.01	PPM
DELTA BHC	11424-3	A	D	<0.01	PPM
CHLORDANE	11424-3	A	D	<0.01	PPM
DIELDRIN	11424-3	A	D	<0.025	PPM
P,P'-DDE	11424-3	A	D	<0.025	PPM
P,P'-DDT	11424-3	A	D	<0.025	PPM
P,P'DDD	11424-3	A	D	<0.025	PPM
ENDOSULFAN I	11424-3	A	D	<0.01	PPM
ENDOSULFAN II	11424-3	A	D	<0.01	PPM
ENDOSULFAN SULFATE	11424-3	A	D	<0.01	PPM
ENDRIN	11424-3	A	D	<0.025	PPM
ENDRIN ALDEHYDE	11424-3	A	D	<0.01	PPM
HEPTACHLOR	11424-3	A	D	<0.025	PPM
HEPTACHLOR EPOXIDE	11424-3	A	D	<0.025	PPM
TOXAPHENE	11424-3	A	D	<0.01	PPM
PCB'S, AROCLOR 1254	11424-3	A	D	<0.01	PPM
TOTAL ORGANIC CARBON	11424-3	A	D	660	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-3					
PHENOL	11396-1	A		<5	PPB
2-CHLOROPHENOL	11396-1	A		<5	PPB
2-NITROPHENOL	11396-1	A		<5	PPB
2,4-DIMETHYLPHENOL	11396-1	A		<5	PPB
2,4-DICHLOROPHENOL	11396-1	A		<5	PPB
4-CHLORO-3-METHYL-PHENOL	11396-1	A		<5	PPB
2,4,6-TRICHLOROPHENOL	11396-1	A		<5	PPB
2,4-DINITROPHENOL	11396-1	A		<50	PPB
4-NITROPHENOL	11396-1	A		<5	PPB
2-METHYL-4,6-DINITROPHENOL	11396-1	A		<50	PPB
PENTACHLOROPHENOL	11396-1	A		<5	PPB
BIS(CHLOROETHYL) ETHER	11396-1	A		<1	PPB
1,2-DICHLOROBENZENE	11396-1	A		<1	PPB
1,4-DICHLOROBENZENE	11396-1	A		<1	PPB
1,3-DICHLOROBENZENE	11396-1	A		<1	PPB
BIS(2-CHLOROISOPROPYL) ETHER	11396-1	A		<1	PPB
N-NITROSODIPROPYL AMINE	11396-1	A		<1	PPB
HEXACHLOROETHANE	11396-1	A		<1	PPB
NITROBENZENE	11396-1	A		<1	PPB
ISOPHORONE	11396-1	A		<1	PPB
BIS(2-CHLOROETHOXY) METHANE	11396-1	A		<1	PPB
1,2,4-TRICHLOROBENZENE	11396-1	A		<1	PPB
NAPHTHALENE	11396-1	A		<1	PPB
HEXACHLOROBUTADIENE	11396-1	A		<1	PPB
HEXACHLOROCYCLOPENTADIENE	11396-1	A		<1	PPB
2-CHLORONAPHTHALENE	11396-1	A		<1	PPB
DIMETHYL PHTHALATE	11396-1	A		<1	PPB
2,6-DINITROTOLUENE	11396-1	A		<1	PPB
ACENAPHTHYLENE	11396-1	A		<1	PPB
ACENAPHTHENE	11396-1	A		<1	PPB
2,4-DINITROTOLUENE	11396-1	A		<1	PPB
DIETHYL PHTHALATE	11396-1	A		<1	PPB
N-NITROSODIMETHYL AMINE	11396-1	A		<1	PPB
4-CHLOROPHENYLPHENYL ETHER	11396-1	A		<1	PPB
FLUORENE	11396-1	A		<1	PPB
AZOBENZENE	11396-1	A		<1	PPB
N-NITROSODIPHENYL AMINE	11396-1	A		<1	PPB
4-BROMOPHENYLPHENYL ETHER	11396-1	A		<1	PPB
HEXACHLOROBENZENE	11396-1	A		<1	PPB
PHENANTHRENE	11396-1	A		<1	PPB
ANTHRACENE	11396-1	A		<1	PPB
DIBUTYL PHTHALATE	11396-1	A		<1	PPB
FLUORANTHENE	11396-1	A		<1	PPB
BENZIDINE	11396-1	A		<30	PPB
PYRENE	11396-1	A		<1	PPB
BUTYLBENZYL PHTHALATE	11396-1	A		<1	PPB
3,3'-DICHLOROBENZIDINE	11396-1	A		<30	PPB
BENZO (A) ANTHRACENE	11396-1	A		<1	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-3					
CHRYSENE	11396-1	A		<1	PPB
BIS (2-ETHYLHEXYL) PHTHLATE	11396-1	A		<1	PPB
DIOCTYL PHTHALATE	11396-1	A		<1	PPB
BENZO (K) FLUORANTHENE	11396-1	A		<1	PPB
BENZO (B) FLUORANTHENE	11396-1	A		<1	PPB
BENZO (A) PYRENE	11396-1	A		<1	PPB
INDENO (1,2,3-C,D) PYRENE	11396-1	A		<20	PPB
DIBENZO (A,H) ANTHRACENE	11396-1	A		<20	PPB
BENZO (GHI) PERYLENE	11396-1	A		<20	PPB
CHLOROMETHANE	11396-1	A		<1	PPB
BROMOMETHANE	11396-1	A		<1	PPB
VINYL CHLORIDE	11396-1	A		<1	PPB
CHLOROETHANE	11396-1	A		<1	PPB
METHYLENE CHLORIDE	11396-1	A		21	PPB
1,1-DICHLOROETHENE	11396-1	A		<1	PPB
1,1-DICHLOROETHANE	11396-1	A		<1	PPB
TRANS-1,2-DICHLOROETHENE	11396-1	A		<1	PPB
CHLOROFORM	11396-1	A		6.8	PPB
1,2-DICHLOROETHANE	11396-1	A		<1	PPB
1,1,1-TRICHLOROETHANE	11396-1	A		100	PPB
CARBON TETRACHLORIDE	11396-1	A		<1	PPB
BROMODICHLOROMETHANE	11396-1	A		<1	PPB
1,2-DICHLOROPROPANE	11396-1	A		<1	PPB
TRANS-1,3-DICHLOROPROPENE	11396-1	A		<1	PPB
TRICHLOROETHENE	11396-1	A		16	PPB
BENZENE	11396-1	A		80	PPB
DIBROMOCHLOROMETHANE	11396-1	A		<1	PPB
1,1,2-TRICHLOROETHANE	11396-1	A		<1	PPB
CIS-1,3-DICHLOROPROPENE	11396-1	A		<1	PPB
2-CHLOROETHYL VINYL ETHER	11396-1	A		<1	PPB
BROMOFORM	11396-1	A		<1	PPB
1,1,2,2-TETRACHLOROETHANE	11396-1	A		<1	PPB
TETRACHLOROETHENE	11396-1	A		15	PPB
TOLUENE	11396-1	A		130	PPB
CHLOROBENZENE	11396-1	A		<1	PPB
ETHYL BENZENE	11396-1	A		20	PPB
DICHLORODIFLUOROMETHANE	11396-1	A		<10	PPB
TRICHLOROFLUOROMETHANE	11396-1	A		<1	PPB
ALDRIN	11396-1	A		<1	PPB
ALPHA BHC	11396-1	A		<1	PPB
BETA BHC	11396-1	A		<5	PPB
GAMMA BHC	11396-1	A		<5	PPB
DELTA BHC	11396-1	A		<5	PPB
CHLORDANE	11396-1	A		<10	PPB
DIELDRIN	11396-1	A		<5	PPB
P,P'-DDE	11396-1	A		<5	PPB
P,P'-DDT	11396-1	A		<5	PPB
P,P'DDD	11396-1	A		<5	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-3					
ENDOSULFAN I	11396-1	A		<10	PPB
ENDOSULFAN II	11396-1	A		<10	PPB
ENDOSULFAN SULFATE	11396-1	A		<10	PPB
ENDRIN	11396-1	A		<5	PPB
ENDRIN ALDEHYDE	11396-1	A		<10	PPB
HEPTACHLOR	11396-1	A		<5	PPB
HEPTACHLOR EPOXIDE	11396-1	A		<5	PPB
TOXAPHENE	11396-1	A		<10	PPB
PCB'S, AROCLOR 1254	11396-1	A		<10	PPB
ARSENIC	11396-1	A		<0.05	PPM
CADMIUM	11396-1	A		<0.01	PPM
CHROMIUM	11396-1	A		<0.05	PPM
LEAD	11396-1	A		0.30	PPM
MERCURY	11396-1	A		<0.002	PPM
SELENIUM	11396-1	A		<0.01	PPM
SILVER	11396-1	A		<0.05	PPM
CYANIDE	11396-1	A		<0.1	PPM
ANTIMONY	11396-1	A		<0.05	PPM
BERYLLIUM	11396-1	A		<0.01	PPM
COPPER	11396-1	A		0.081	PPM
NICKEL	11396-1	A		0.13	PPM
THALLIUM	11396-1	A		<0.1	PPM
ZINC	11396-1	A		0.57	PPM
PHENOLICS, AS PHENOL	11396-1	A		2.5	PPM
TOTAL ORGANIC CARBON	11396-1	A		48	PPM
OIL & GREASE	11396-1	A		3.8	PPM
TOTAL SUSPENDED SOLIDS	11396-1	A		30	PPM
ARSENIC	11396-1	A	D	<0.05	PPM
CADMIUM	11396-1	A	D	<0.01	PPM
CHROMIUM	11396-1	A	D	<0.05	PPM
LEAD	11396-1	A	D	0.23	PPM
MERCURY	11396-1	A	D	<0.002	PPM
SELENIUM	11396-1	A	D	<0.01	PPM
SILVER	11396-1	A	D	<0.05	PPM
CYANIDE	11396-1	A	D	<0.1	PPM
ANTIMONY	11396-1	A	D	<0.05	PPM
BERYLLIUM	11396-1	A	D	<0.01	PPM
COPPER	11396-1	A	D	0.075	PPM
NICKEL	11396-1	A	D	0.13	PPM
THALLIUM	11396-1	A	D	<0.1	PPM
ZINC	11396-1	A	D	0.56	PPM
PHENOLICS, AS PHENOL	11396-1	A	D	2.5	PPM
TOTAL ORGANIC CARBON	11396-1	A	D	51	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-4					
PHENOL	11396-2	A		16,000	PPB
2-CHLOROPHENOL	11396-2	A		<5	PPB
2-NITROPHENOL	11396-2	A		<5	PPB
2,4-DIMETHYLPHENOL	11396-2	A		7,400	PPB
2,4-DICHLOROPHENOL	11396-2	A		<5	PPB
4-CHLORO-3-METHYL-PHENOL	11396-2	A		<5	PPB
2,4,6-TRICHLOROPHENOL	11396-2	A		<5	PPB
2,4-DINITROPHENOL	11396-2	A		<50	PPB
4-NITROPHENOL	11396-2	A		<5	PPB
2-METHYL-4,6-DINITROPHENOL	11396-2	A		<50	PPB
PENTACHLOROPHENOL	11396-2	A		<5	PPB
BIS(CHLOROETHYL) ETHER	11396-2	A		<1	PPB
1,2-DICHLOROBENZENE	11396-2	A		<1	PPB
1,4-DICHLOROBENZENE	11396-2	A		<1	PPB
1,3-DICHLOROBENZENE	11396-2	A		<1	PPB
BIS(2-CHLOROISOPROPYL) ETHER	11396-2	A		<1	PPB
N-NITROSODIPROPYL AMINE	11396-2	A		<1	PPB
HEXACHLOROETHANE	11396-2	A		<1	PPB
NITROBENZENE	11396-2	A		<1	PPB
ISOPHORONE	11396-2	A		<1	PPB
BIS(2-CHLOROETHOXY) METHANE	11396-2	A		<1	PPB
1,2,4-TRICHLOROBENZENE	11396-2	A		<1	PPB
NAPHTHALENE	11396-2	A		25,000	PPB
HEXACHLOROBUTADIENE	11396-2	A		<1	PPB
HEXACHLOROCYCLOPENTADIENE	11396-2	A		<1	PPB
2-CHLORONAPHTHALENE	11396-2	A		<1	PPB
DIMETHYL PHTHALATE	11396-2	A		<1	PPB
2,6-DINITROTOLUENE	11396-2	A		<1	PPB
ACENAPHTHYLENE	11396-2	A		<1	PPB
ACENAPHTHENE	11396-2	A		890	PPB
2,4-DINITROTOLUENE	11396-2	A		<1	PPB
DIETHYL PHTHALATE	11396-2	A		<1	PPB
N-NITROSODIMETHYL AMINE	11396-2	A		<1	PPB
4-CHLOROPHENYLPHENYL ETHER	11396-2	A		<1	PPB
FLUORENE	11396-2	A		<1	PPB
AZOBENZENE	11396-2	A		<1	PPB
N-NITROSODIPHENYL AMINE	11396-2	A		<1	PPB
4-BROMOPHENYLPHENYL ETHER	11396-2	A		<1	PPB
HEXACHLOROBENZENE	11396-2	A		<1	PPB
PHENANTHRENE	11396-2	A		<1	PPB
ANTHRACENE	11396-2	A		240	PPB
DIBUTYL PHTHALATE	11396-2	A		<1	PPB
FLUORANTHENE	11396-2	A		89	PPB
BENZIDINE	11396-2	A		<30	PPB
PYRENE	11396-2	A		50	PPB
BUTYLBENZYL PHTHALATE	11396-2	A		<1	PPB
3,3'-DICHLOROBENZIDINE	11396-2	A		<30	PPB
BENZO (A) ANTHRACENE	11396-2	A		<1	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-4					
CHRYSENE	11396-2	A		<1	PPB
BIS (2-ETHYLHEXYL) PHTHLATE	11396-2	A		<1	PPB
DIOCTYL PHTHALATE	11396-2	A		<1	PPB
BENZO (K) FLUORANTHENE	11396-2	A		<1	PPB
BENZO (B) FLUORANTHENE	11396-2	A		<1	PPB
BENZO (A) PYRENE	11396-2	A		<1	PPB
INDENO (1,2,3-C,D) PYRENE	11396-2	A		<20	PPB
DIBENZO (A,H) ANTHRACENE	11396-2	A		<20	PPB
BENZO (GHI) PERYLENE	11396-2	A		<20	PPB
CHLOROMETHANE	11396-2	A		<1	PPB
BROMOMETHANE	11396-2	A		<1	PPB
VINYL CHLORIDE	11396-2	A		<1	PPB
CHLOROETHANE	11396-2	A		<1	PPB
METHYLENE CHLORIDE	11396-2	A		<1	PPB
1,1-DICHLOROETHENE	11396-2	A		<1	PPB
1,1-DICHLOROETHANE	11396-2	A		<1	PPB
TRANS-1,2-DICHLOROETHENE	11396-2	A		<1	PPB
CHLOROFORM	11396-2	A		<1	PPB
1,2-DICHLOROETHANE	11396-2	A		<1	PPB
1,1,1-TRICHLOROETHANE	11396-2	A		<1	PPB
CARBON TETRACHLORIDE	11396-2	A		<1	PPB
BROMODICHLOROMETHANE	11396-2	A		<1	PPB
1,2-DICHLOROPROPANE	11396-2	A		<1	PPB
TRANS-1,3-DICHLOROPROPENE	11396-2	A		<1	PPB
TRICHLOROETHENE	11396-2	A		<1	PPB
BENZENE	11396-2	A		23	PPB
DIBROMOCHLOROMETHANE	11396-2	A		<1	PPB
1,1,2-TRICHLOROETHANE	11396-2	A		<1	PPB
CIS-1,3-DICHLOROPROPENE	11396-2	A		<1	PPB
2-CHLOROETHYL VINYL ETHER	11396-2	A		<1	PPB
BROMOFORM	11396-2	A		<1	PPB
1,1,2,2-TETRACHLOROETHANE	11396-2	A		<1	PPB
TETRACHLOROETHENE	11396-2	A		<1	PPB
TOLUENE	11396-2	A		18	PPB
CHLOROBENZENE	11396-2	A		<1	PPB
ETHYL BENZENE	11396-2	A		<1	PPB
DICHLORODIFLUOROMETHANE	11396-2	A		<10	PPB
TRICHLOROFLUOROMETHANE	11396-2	A		<1	PPB
ALDRIN	11396-2	A		<1	PPB
ALPHA BHC	11396-2	A		<1	PPB
BETA BHC	11396-2	A		<5	PPB
GAMMA BHC	11396-2	A		<5	PPB
DELTA BHC	11396-2	A		<5	PPB
CHLORDANE	11396-2	A		<10	PPB
DIELDRIN	11396-2	A		<5	PPB
P,P'-DDE	11396-2	A		<5	PPB
P,P'-DDT	11396-2	A		<5	PPB
P,P'DDD	11396-2	A		<5	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-4					
ENDOSULFAN I	11396-2	A		<10	PPB
ENDOSULFAN II	11396-2	A		<10	PPB
ENDOSULFAN SULFATE	11396-2	A		<10	PPB
ENDRIN	11396-2	A		<5	PPB
ENDRIN ALDEHYDE	11396-2	A		<10	PPB
HEPTACHLOR	11396-2	A		<5	PPB
HEPTACHLOR EPOXIDE	11396-2	A		<5	PPB
TOXAPHENE	11396-2	A		<10	PPB
PCB'S, AROCLOR 1254	11396-2	A		<10	PPB
ARSENIC	11396-2	A		<0.05	PPM
CADMIUM	11396-2	A		<0.01	PPM
CHROMIUM	11396-2	A		<0.05	PPM
LEAD	11396-2	A		<0.05	PPM
MERCURY	11396-2	A		<0.002	PPM
SELENIUM	11396-2	A		<0.01	PPM
SILVER	11396-2	A		<0.05	PPM
CYANIDE	11396-2	A		<0.1	PPM
ANTIMONY	11396-2	A		<0.05	PPM
BERYLLIUM	11396-2	A		<0.01	PPM
COPPER	11396-2	A		<0.05	PPM
NICKEL	11396-2	A		<0.05	PPM
THALLIUM	11396-2	A		<0.1	PPM
ZINC	11396-2	A		0.22	PPM
PHENOLICS, AS PHENOL	11396-2	A		22	PPM
TOTAL ORGANIC CARBON	11396-2	A		69	PPM
OIL & GREASE	11396-2	A		2.9	PPM
TOTAL SUSPENDED SOLIDS	11396-2	A		19	PPM
PHENOL	11396-2	A	D	5,100	PPB
2-CHLOROPHENOL	11396-2	A	D	<5	PPB
2-NITROPHENOL	11396-2	A	D	<5	PPB
2,4-DIMETHYLPHENOL	11396-2	A	D	5,600	PPB
2,4-DICHLOROPHENOL	11396-2	A	D	<5	PPB
4-CHLORO-3-METHYL-PHENOL	11396-2	A	D	<5	PPB
2,4,6-TRICHLOROPHENOL	11396-2	A	D	<5	PPB
2,4-DINITROPHENOL	11396-2	A	D	<50	PPB
4-NITROPHENOL	11396-2	A	D	<5	PPB
2-METHYL-4,6-DINITROPHENOL	11396-2	A	D	<50	PPB
PENTACHLOROPHENOL	11396-2	A	D	<5	PPB
BIS(CHLOROETHYL) ETHER	11396-2	A	D	<1	PPB
1,2-DICHLOROBENZENE	11396-2	A	D	<1	PPB
1,4-DICHLOROBENZENE	11396-2	A	D	<1	PPB
1,3-DICHLOROBENZENE	11396-2	A	D	<1	PPB
BIS(2-CHLOROISOPROPYL) ETHER	11396-2	A	D	<1	PPB
N-NITROSODIPROPYL AMINE	11396-2	A	D	<1	PPB
HEXACHLOROETHANE	11396-2	A	D	<1	PPB
NITROBENZENE	11396-2	A	D	<1	PPB
ISOPHORONE	11396-2	A	D	<1	PPB
BIS(2-CHLOROETHOXY) METHANE	11396-2	A	D	<1	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-4					
1,2,4-TRICHLOROBENZENE	11396-2	A	D	<1	PPB
NAPHTHALENE	11396-2	A	D	6,400	PPB
HEXACHLOROBUTADIENE	11396-2	A	D	<1	PPB
HEXACHLOROCYCLOPENTADIENE	11396-2	A	D	<1	PPB
2-CHLORONAPHTHALENE	11396-2	A	D	<1	PPB
DIMETHYL PHTHALATE	11396-2	A	D	<1	PPB
2,6-DINITROTOLUENE	11396-2	A	D	<1	PPB
ACENAPHTHYLENE	11396-2	A	D	<1	PPB
ACENAPHTHENE	11396-2	A	D	200	PPB
2,4-DINITROTOLUENE	11396-2	A	D	<1	PPB
DIETHYL PHTHALATE	11396-2	A	D	<1	PPB
N-NITROSODIMETHYL AMINE	11396-2	A	D	<1	PPB
4-CHLOROPHENYLPHENYL ETHER	11396-2	A	D	<1	PPB
FLUORENE	11396-2	A	D	<1	PPB
AZOBENZENE	11396-2	A	D	<1	PPB
N-NITROSODIPHENYL AMINE	11396-2	A	D	<1	PPB
4-BROMOPHENYLPHENYL ETHER	11396-2	A	D	<1	PPB
HEXACHLOROBENZENE	11396-2	A	D	<1	PPB
PHENANTHRENE	11396-2	A	D	<1	PPB
ANTHRACENE	11396-2	A	D	110	PPB
DIBUTYL PHTHALATE	11396-2	A	D	<1	PPB
FLUORANTHENE	11396-2	A	D	57	PPB
BENZIDINE	11396-2	A	D	<30	PPB
PYRENE	11396-2	A	D	33	PPB
BUTYLBENZYL PHTHALATE	11396-2	A	D	<1	PPB
3,3'-DICHLOROBENZIDINE	11396-2	A	D	<30	PPB
BENZO (A) ANTHRACENE	11396-2	A	D	<1	PPB
CHRYSENE	11396-2	A	D	<1	PPB
BIS (2-ETHYLHEXYL) PHTHLATE	11396-2	A	D	<1	PPB
DIOCTYL PHTHALATE	11396-2	A	D	<1	PPB
BENZO (K) FLUORANTHENE	11396-2	A	D	<1	PPB
BENZO (B) FLUORANTHENE	11396-2	A	D	<1	PPB
BENZO (A) PYRENE	11396-2	A	D	<1	PPB
INDENO (1,2,3-C,D) PYRENE	11396-2	A	D	<20	PPB
DIBENZO (A,H) ANTHRACENE	11396-2	A	D	<20	PPB
BENZO (GHI) PERYLENE	11396-2	A	D	<20	PPB
CHLOROMETHANE	11396-2	A	D	<1	PPB
BROMOMETHANE	11396-2	A	D	<1	PPB
VINYL CHLORIDE	11396-2	A	D	<1	PPB
CHLOROETHANE	11396-2	A	D	<1	PPB
METHYLENE CHLORIDE	11396-2	A	D	<1	PPB
1,1-DICHLOROETHENE	11396-2	A	D	<1	PPB
1,1-DICHLOROETHANE	11396-2	A	D	<1	PPB
TRANS-1,2-DICHLOROETHENE	11396-2	A	D	<1	PPB
CHLOROFORM	11396-2	A	D	<1	PPB
1,2-DICHLOROETHANE	11396-2	A	D	<1	PPB
1,1,1-TRICHLOROETHANE	11396-2	A	D	<1	PPB
CARBON TETRACHLORIDE	11396-2	A	D	<1	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-4					
BROMODICHLOROMETHANE	11396-2	A	D	<1	PPB
1,2-DICHLOROPROPANE	11396-2	A	D	<1	PPB
TRANS-1,3-DICHLOROPROPENE	11396-2	A	D	<1	PPB
TRICHLOROETHENE	11396-2	A	D	<1	PPB
BENZENE	11396-2	A	D	24	PPB
DIBROMOCHLOROMETHANE	11396-2	A	D	<1	PPB
1,1,2-TRICHLOROETHANE	11396-2	A	D	<1	PPB
CIS-1,3-DICHLOROPROPENE	11396-2	A	D	<1	PPB
2-CHLOROETHYL VINYL ETHER	11396-2	A	D	<1	PPB
BROMOFORM	11396-2	A	D	<1	PPB
1,1,2,2-TETRACHLOROETHANE	11396-2	A	D	<1	PPB
TETRACHLOROETHENE	11396-2	A	D	<1	PPB
TOLUENE	11396-2	A	D	18	PPB
CHLOROBENZENE	11396-2	A	D	<1	PPB
ETHYL BENZENE	11396-2	A	D	<1	PPB
DICHLORODIFLUOROMETHANE	11396-2	A	D	<10	PPB
TRICHLOROFLUOROMETHANE	11396-2	A	D	<1	PPB
ALDRIN	11396-2	A	D	<1	PPB
ALPHA BHC	11396-2	A	D	<1	PPB
BETA BHC	11396-2	A	D	<5	PPB
GAMMA BHC	11396-2	A	D	<5	PPB
DELTA BHC	11396-2	A	D	<5	PPB
CHLORDANE	11396-2	A	D	<10	PPB
DIELDRIN	11396-2	A	D	<5	PPB
P,P'-DDE	11396-2	A	D	<5	PPB
P,P'-DDT	11396-2	A	D	<5	PPB
P,P'DDD	11396-2	A	D	<5	PPB
ENDOSULFAN I	11396-2	A	D	<10	PPB
ENDOSULFAN II	11396-2	A	D	<10	PPB
ENDOSULFAN SULFATE	11396-2	A	D	<10	PPB
ENDRIN	11396-2	A	D	<5	PPB
ENDRIN ALDEHYDE	11396-2	A	D	<10	PPB
HEPTACHLOR	11396-2	A	D	<5	PPB
HEPTACHLOR EPOXIDE	11396-2	A	D	<5	PPB
TOXAPHENE	11396-2	A	D	<10	PPB
PCB'S, AROCLOR 1254	11396-2	A	D	<10	PPB
TOTAL ORGANIC CARBON	11396-2	A	D	71	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-6					
PHENOL	11424-2	A		1.5	PPM
2-CHLOROPHENOL	11424-2	A		<0.1	PPM
2-NITROPHENOL	11424-2	A		<0.1	PPM
2,4-DIMETHYLPHENOL	11424-2	A		<0.1	PPM
2,4-DICHLOROPHENOL	11424-2	A		<0.1	PPM
4-CHLORO-3-METHYL-PHENOL	11424-2	A		<0.1	PPM
2,4,6-TRICHLOROPHENOL	11424-2	A		<0.1	PPM
2,4-DINITROPHENOL	11424-2	A		<1	PPM
4-NITROPHENOL	11424-2	A		<0.1	PPM
2-METHYL-4,6-DINITROPHENOL	11424-2	A		<1	PPM
PENTACHLOROPHENOL	11424-2	A		<0.1	PPM
BIS(CHLOROETHYL) ETHER	11424-2	A		<0.02	PPM
1,2-DICHLOROBENZENE	11424-2	A		0.70	PPM
1,4-DICHLOROBENZENE	11424-2	A		<0.02	PPM
1,3-DICHLOROBENZENE	11424-2	A		<0.02	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11424-2	A		<0.02	PPM
N-NITROSODIPROPYL AMINE	11424-2	A		<0.02	PPM
HEXACHLOROETHANE	11424-2	A		<0.02	PPM
NITROBENZENE	11424-2	A		<0.02	PPM
ISOPHORONE	11424-2	A		<0.02	PPM
BIS(2-CHLOROETHOXY) METHANE	11424-2	A		<0.02	PPM
1,2,4-TRICHLOROBENZENE	11424-2	A		<0.02	PPM
NAPHTHALENE	11424-2	A		1.5	PPM
HEXACHLOROBUTADIENE	11424-2	A		<0.02	PPM
HEXACHLOROCYCLOPENTADIENE	11424-2	A		<0.02	PPM
2-CHLORONAPHTHALENE	11424-2	A		0.075	PPM
DIMETHYL PHTHALATE	11424-2	A		<0.02	PPM
2,6-DINITROTOLUENE	11424-2	A		<0.02	PPM
ACENAPHTHYLENE	11424-2	A		<0.02	PPM
ACENAPHTHENE	11424-2	A		<0.02	PPM
2,4-DINITROTOLUENE	11424-2	A		<0.02	PPM
DIETHYL PHTHALATE	11424-2	A		<0.02	PPM
N-NITROSODIMETHYL AMINE	11424-2	A		<0.02	PPM
4-CHLOROPHENYLPHENYL ETHER	11424-2	A		<0.02	PPM
FLUORENE	11424-2	A		0.24	PPM
AZOBENZENE	11424-2	A		<0.02	PPM
N-NITROSODIPHENYL AMINE	11424-2	A		<0.02	PPM
4-BROMOPHENYLPHENYL ETHER	11424-2	A		<0.02	PPM
HEXACHLOROBENZENE	11424-2	A		<0.02	PPM
PHENANTHRENE	11424-2	A		0.50	PPM
ANTHRACENE	11424-2	A		<0.02	PPM
DIBUTYL PHTHALATE	11424-2	A		0.15	PPM
FLUORANTHENE	11424-2	A		<0.02	PPM
BENZIDINE	11424-2	A		<0.6	PPM
PYRENE	11424-2	A		0.3	PPM
BUTYLBENZYL PHTHALATE	11424-2	A		<0.02	PPM
3,3'-DICHLOROBENZIDINE	11424-2	A		<0.6	PPM
BENZO (A) ANTHRACENE	11424-2	A		<0.02	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-6					
CHRYSENE	11424-2	A		<0.02	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11424-2	A		0.055	PPM
DIOCTYL PHTHALATE	11424-2	A		<0.02	PPM
BENZO (K) FLUORANTHENE	11424-2	A		<0.02	PPM
BENZO (B) FLUORANTHENE	11424-2	A		<0.02	PPM
BENZO (A) PYRENE	11424-2	A		<0.02	PPM
INDENO (1,2,3-C,D) PYRENE	11424-2	A		<0.4	PPM
DIBENZO (A,H) ANTHRACENE	11424-2	A		<0.4	PPM
BENZO (GHI) PERYLENE	11424-2	A		<0.4	PPM
CHLOROMETHANE	11424-2	A		<0.1	PPM
BROMOMETHANE	11424-2	A		<0.1	PPM
VINYL CHLORIDE	11424-2	A		<0.1	PPM
CHLOROETHANE	11424-2	A		<0.1	PPM
METHYLENE CHLORIDE	11424-2	A		35	PPM
1,1-DICHLOROETHENE	11424-2	A		<0.1	PPM
1,1-DICHLOROETHANE	11424-2	A		<0.1	PPM
TRANS-1,2-DICHLOROETHENE	11424-2	A		<0.1	PPM
CHLOROFORM	11424-2	A		3.2	PPM
1,2-DICHLOROETHANE	11424-2	A		<0.1	PPM
1,1,1-TRICHLOROETHANE	11424-2	A		4.6	PPM
CARBON TETRACHLORIDE	11424-2	A		<0.1	PPM
BROMODICHLOROMETHANE	11424-2	A		<0.1	PPM
1,2-DICHLOROPROPANE	11424-2	A		<0.1	PPM
TRANS-1,3-DICHLOROPROPENE	11424-2	A		<0.1	PPM
TRICHLOROETHENE	11424-2	A		1.0	PPM
BENZENE	11424-2	A		2.8	PPM
DIBROMOCHLOROMETHANE	11424-2	A		<0.1	PPM
1,1,2-TRICHLOROETHANE	11424-2	A		<0.1	PPM
CIS-1,3-DICHLOROPROPENE	11424-2	A		<0.1	PPM
2-CHLOROETHYL VINYL ETHER	11424-2	A		<0.1	PPM
BROMOFORM	11424-2	A		<0.1	PPM
1,1,2,2-TETRACHLOROETHANE	11424-2	A		<0.1	PPM
TETRACHLOROETHENE	11424-2	A		0.35	PPM
TOLUENE	11424-2	A		7.5	PPM
CHLOROBENZENE	11424-2	A		<0.1	PPM
ETHYL BENZENE	11424-2	A		0.82	PPM
DICHLORODIFLUOROMETHANE	11424-2	A		<1	PPM
TRICHLOROFLUOROMETHANE	11424-2	A		<0.1	PPM
ALDRIN	11424-2	A		<0.005	PPM
ALPHA BHC	11424-2	A		<0.005	PPM
BETA BHC	11424-2	A		<0.025	PPM
GAMMA BHC	11424-2	A		<0.01	PPM
DELTA BHC	11424-2	A		<0.01	PPM
CHLORDANE	11424-2	A		<0.01	PPM
DIELDRIN	11424-2	A		<0.025	PPM
P,P'-DDE	11424-2	A		<0.025	PPM
P,P'-DDT	11424-2	A		<0.025	PPM
P,P'DDD	11424-2	A		<0.025	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-6					
ENDOSULFAN I	11424-2	A		<0.01	PPM
ENDOSULFAN II	11424-2	A		<0.01	PPM
ENDOSULFAN SULFATE	11424-2	A		<0.01	PPM
ENDRIN	11424-2	A		<0.025	PPM
ENDRIN ALDEHYDE	11424-2	A		<0.01	PPM
HEPTACHLOR	11424-2	A		<0.025	PPM
HEPTACHLOR EPOXIDE	11424-2	A		<0.025	PPM
TOXAPHENE	11424-2	A		<0.01	PPM
PCB'S, AROCLOR 1254	11424-2	A		<0.01	PPM
ARSENIC	11424-2	A		0.35	PPM
CADMIUM	11424-2	A		<0.1	PPM
CHROMIUM	11424-2	A		0.77	PPM
LEAD	11424-2	A		4.3	PPM
MERCURY	11424-2	A		<0.2	PPM
SELENIUM	11424-2	A		<0.2	PPM
SILVER	11424-2	A		<0.5	PPM
CYANIDE	11424-2	A		4.0	PPM
ANTIMONY	11424-2	A		<0.05	PPM
BERYLLIUM	11424-2	A		<0.01	PPM
COPPER	11424-2	A		0.73	PPM
NICKEL	11424-2	A		1.5	PPM
THALLIUM	11424-2	A		<10	PPM
ZINC	11424-2	A		80	PPM
PHENOLICS, AS PHENOL	11424-2	A		140	PPM
TOTAL ORGANIC CARBON	11424-2	A		8,900	PPM
OIL & GREASE	11424-2	A		120,000	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-7					
PHENOL	11424-1	A		27	PPM
2-CHLOROPHENOL	11424-1	A		<1	PPM
2-NITROPHENOL	11424-1	A		<1	PPM
2,4-DIMETHYLPHENOL	11424-1	A		<1	PPM
2,4-DICHLOROPHENOL	11424-1	A		<1	PPM
4-CHLORO-3-METHYL-PHENOL	11424-1	A		<1	PPM
2,4,6-TRICHLOROPHENOL	11424-1	A		<1	PPM
2,4-DINITROPHENOL	11424-1	A		<10	PPM
4-NITROPHENOL	11424-1	A		<1	PPM
2-METHYL-4,6-DINITROPHENOL	11424-1	A		<10	PPM
PENTACHLOROPHENOL	11424-1	A		<1	PPM
BIS(CHLOROETHYL) ETHER	11424-1	A		<0.02	PPM
1,2-DICHLOROBENZENE	11424-1	A		<0.02	PPM
1,4-DICHLOROBENZENE	11424-1	A		<0.02	PPM
1,3-DICHLOROBENZENE	11424-1	A		<0.02	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11424-1	A		<0.02	PPM
N-NITROSODIPROPYL AMINE	11424-1	A		<0.02	PPM
HEXACHLOROETHANE	11424-1	A		<0.02	PPM
NITROBENZENE	11424-1	A		<0.02	PPM
ISOPHORONE	11424-1	A		1.3	PPM
BIS(2-CHLOROETHOXY) METHANE	11424-1	A		<0.02	PPM
1,2,4-TRICHLOROBENZENE	11424-1	A		<0.02	PPM
NAPHTHALENE	11424-1	A		1.7	PPM
HEXACHLOROBUTADIENE	11424-1	A		<0.02	PPM
HEXACHLOROCYCLOPENTADIENE	11424-1	A		<0.02	PPM
2-CHLORONAPHTHALENE	11424-1	A		<0.02	PPM
DIMETHYL PHTHALATE	11424-1	A		<0.02	PPM
2,6-DINITROTOLUENE	11424-1	A		<0.02	PPM
ACENAPHTHYLENE	11424-1	A		<0.02	PPM
ACENAPHTHENE	11424-1	A		<0.02	PPM
2,4-DINITROTOLUENE	11424-1	A		<0.02	PPM
DIETHYL PHTHALATE	11424-1	A		<0.02	PPM
N-NITROSODIMETHYL AMINE	11424-1	A		<0.02	PPM
4-CHLOROPHENYLPHENYL ETHER	11424-1	A		<0.02	PPM
FLUORENE	11424-1	A		<0.02	PPM
AZOBENZENE	11424-1	A		<0.02	PPM
N-NITROSODIPHENYL AMINE	11424-1	A		<0.02	PPM
4-BROMOPHENYLPHENYL ETHER	11424-1	A		<0.02	PPM
HEXACHLOROBENZENE	11424-1	A		<0.02	PPM
PHENANTHRENE	11424-1	A		<0.02	PPM
ANTHRACENE	11424-1	A		<0.02	PPM
DIBUTYL PHTHALATE	11424-1	A		<0.02	PPM
FLUORANTHENE	11424-1	A		<0.02	PPM
BENZIDINE	11424-1	A		<0.6	PPM
PYRENE	11424-1	A		<0.02	PPM
BUTYLBENZYL PHTHALATE	11424-1	A		<0.02	PPM
3,3'-DICHLOROBENZIDINE	11424-1	A		<0.6	PPM
BENZO (A) ANTHRACENE	11424-1	A		<0.02	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-7					
CHRYSENE	11424-1	A		<0.02	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11424-1	A		<0.02	PPM
DIOCTYL PHTHALATE	11424-1	A		<0.02	PPM
BENZO (K) FLUORANTHENE	11424-1	A		<0.02	PPM
BENZO (B) FLUORANTHENE	11424-1	A		<0.02	PPM
BENZO (A) PYRENE	11424-1	A		<0.02	PPM
INDENO (1,2,3-C,D) PYRENE	11424-1	A		<0.4	PPM
DIBENZO (A,H) ANTHRACENE	11424-1	A		<0.4	PPM
BENZO (GHI) PERYLENE	11424-1	A		<0.4	PPM
CHLOROMETHANE	11424-1	A		<0.05	PPM
BROMOMETHANE	11424-1	A		<0.05	PPM
VINYL CHLORIDE	11424-1	A		<0.05	PPM
CHLOROETHANE	11424-1	A		<0.05	PPM
METHYLENE CHLORIDE	11424-1	A		5.6	PPM
1,1-DICHLOROETHENE	11424-1	A		<0.05	PPM
1,1-DICHLOROETHANE	11424-1	A		<0.05	PPM
TRANS-1,2-DICHLOROETHENE	11424-1	A		<0.05	PPM
CHLOROFORM	11424-1	A		<0.05	PPM
1,2-DICHLOROETHANE	11424-1	A		<0.05	PPM
1,1,1-TRICHLOROETHANE	11424-1	A		0.24	PPM
CARBON TETRACHLORIDE	11424-1	A		<0.05	PPM
BROMODICHLOROMETHANE	11424-1	A		<0.05	PPM
1,2-DICHLOROPROPANE	11424-1	A		<0.05	PPM
TRANS-1,3-DICHLOROPROPENE	11424-1	A		<0.05	PPM
TRICHLOROETHENE	11424-1	A		0.18	PPM
BENZENE	11424-1	A		<0.05	PPM
DIBROMOCHLOROMETHANE	11424-1	A		<0.05	PPM
1,1,2-TRICHLOROETHANE	11424-1	A		<0.05	PPM
CIS-1,3-DICHLOROPROPENE	11424-1	A		<0.05	PPM
2-CHLOROETHYL VINYL ETHER	11424-1	A		<0.05	PPM
BROMOFORM	11424-1	A		<0.05	PPM
1,1,2,2-TETRACHLOROETHANE	11424-1	A		<0.05	PPM
TETRACHLOROETHENE	11424-1	A		0.084	PPM
TOLUENE	11424-1	A		0.77	PPM
CHLOROBENZENE	11424-1	A		<0.05	PPM
ETHYL BENZENE	11424-1	A		0.18	PPM
DICHLORODIFLUOROMETHANE	11424-1	A		<0.5	PPM
TRICHLOROFLUOROMETHANE	11424-1	A		<0.05	PPM
ALDRIN	11424-1	A		<1	PPM
ALPHA BHC	11424-1	A		<1	PPM
BETA BHC	11424-1	A		<5	PPM
GAMMA BHC	11424-1	A		<5	PPM
DELTA BHC	11424-1	A		<5	PPM
CHLORDANE	11424-1	A		<10	PPM
DIELDRIN	11424-1	A		<5	PPM
P,P'-DDE	11424-1	A		<5	PPM
P,P'-DDT	11424-1	A		<5	PPM
P,P'DDD	11424-1	A		<5	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK A-7					
ENDOSULFAN I	11424-1	A		<10	PPM
ENDOSULFAN II	11424-1	A		<10	PPM
ENDOSULFAN SULFATE	11424-1	A		<10	PPM
ENDRIN	11424-1	A		<5	PPM
ENDRIN ALDEHYDE	11424-1	A		<10	PPM
HEPTACHLOR	11424-1	A		<1	PPM
HEPTACHLOR EPOXIDE	11424-1	A		<5	PPM
TOXAPHENE	11424-1	A		<10	PPM
PCB'S, AROCLOR 1254	11424-1	A		<1	PPM
ARSENIC	11424-1	A		0.059	PPM
CADMIUM	11424-1	A		<0.1	PPM
CHROMIUM	11424-1	A		2.2	PPM
LEAD	11424-1	A		33	PPM
MERCURY	11424-1	A		<0.2	PPM
SELENIUM	11424-1	A		<0.2	PPM
SILVER	11424-1	A		<0.5	PPM
CYANIDE	11424-1	A		1.4	PPM
ANTIMONY	11424-1	A		<0.05	PPM
BERYLLIUM	11424-1	A		<0.01	PPM
COPPER	11424-1	A		3.5	PPM
NICKEL	11424-1	A		8.2	PPM
THALLIUM	11424-1	A		<10	PPM
ZINC	11424-1	A		77	PPM
PHENOLICS, AS PHENOL	11424-1	A		39	PPM
TOTAL ORGANIC CARBON	11424-1	A		8,700	PPM
OIL & GREASE	11424-1	A		11,000	PPM
ARSENIC	11424-1	A	D	0.060	PPM
CADMIUM	11424-1	A	D	<0.1	PPM
CHROMIUM	11424-1	A	D	2.5	PPM
LEAD	11424-1	A	D	33	PPM
MERCURY	11424-1	A	D	<0.2	PPM
SELENIUM	11424-1	A	D	<0.2	PPM
SILVER	11424-1	A	D	<0.5	PPM
ANTIMONY	11424-1	A	D	<0.05	PPM
BERYLLIUM	11424-1	A	D	<0.01	PPM
COPPER	11424-1	A	D	3.6	PPM
NICKEL	11424-1	A	D	8.3	PPM
THALLIUM	11424-1	A	D	<10	PPM
ZINC	11424-1	A	D	77	PPM
TOTAL ORGANIC CARBON	11424-1	A	D	8,900	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK C-5					
PHENOL	11528-1	S		53	PPM
2-CHLOROPHENOL	11528-1	S		<50	PPM
2-NITROPHENOL	11528-1	S		<50	PPM
2,4-DIMETHYLPHENOL	11528-1	S		<50	PPM
2,4-DICHLOROPHENOL	11528-1	S		<50	PPM
4-CHLORO-3-METHYL-PHENOL	11528-1	S		<50	PPM
2,4,6-TRICHLOROPHENOL	11528-1	S		<50	PPM
2,4-DINITROPHENOL	11528-1	S		<500	PPM
4-NITROPHENOL	11528-1	S		<50	PPM
2-METHYL-4,6-DINITROPHENOL	11528-1	S		<500	PPM
PENTACHLOROPHENOL	11528-1	S		<50	PPM
BIS(CHLOROETHYL) ETHER	11528-1	S		<10	PPM
1,2-DICHLOROBENZENE	11528-1	S		<10	PPM
1,4-DICHLOROBENZENE	11528-1	S		<10	PPM
1,3-DICHLOROBENZENE	11528-1	S		<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11528-1	S		<10	PPM
N-NITROSODIPROPYL AMINE	11528-1	S		<10	PPM
HEXACHLOROETHANE	11528-1	S		<10	PPM
NITROBENZENE	11528-1	S		<10	PPM
ISOPHORONE	11528-1	S		<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11528-1	S		<10	PPM
1,2,4-TRICHLOROBENZENE	11528-1	S		<10	PPM
NAPHTHALENE	11528-1	S		900	PPM
HEXACHLOROBUTADIENE	11528-1	S		<10	PPM
HEXACHLOROCYCLOPENTADIENE	11528-1	S		<10	PPM
2-CHLORONAPHTHALENE	11528-1	S		<10	PPM
DIMETHYL PHTHALATE	11528-1	S		<10	PPM
2,6-DINITROTOLUENE	11528-1	S		<10	PPM
ACENAPHTHYLENE	11528-1	S		<10	PPM
ACENAPHTHENE	11528-1	S		150	PPM
2,4-DINITROTOLUENE	11528-1	S		<10	PPM
DIETHYL PHTHALATE	11528-1	S		<10	PPM
N-NITROSODIMETHYL AMINE	11528-1	S		<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11528-1	S		<10	PPM
FLUORENE	11528-1	S		<10	PPM
AZOBENZENE	11528-1	S		<10	PPM
N-NITROSODIPHENYL AMINE	11528-1	S		<10	PPM
4-BROMOPHENYLPHENYL ETHER	11528-1	S		<10	PPM
HEXACHLOROBENZENE	11528-1	S		<10	PPM
PHENANTHRENE	11528-1	S		630	PPM
ANTHRACENE	11528-1	S		140	PPM
DIBUTYL PHTHALATE	11528-1	S		480	PPM
FLUORANTHENE	11528-1	S		380	PPM
BENZIDINE	11528-1	S		<300	PPM
PYRENE	11528-1	S		350	PPM
BUTYLBENZYL PHTHALATE	11528-1	S		<10	PPM
3,3'-DICHLOROBENZIDINE	11528-1	S		<300	PPM
BENZO (A) ANTHRACENE	11528-1	S		<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK C-5					
CHRYSENE	11528-1	S		<10	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11528-1	S		810	PPM
DIOCTYL PHTHALATE	11528-1	S		<10	PPM
BENZO (K) FLUORANTHENE	11528-1	S		<10	PPM
BENZO (B) FLUORANTHENE	11528-1	S		<10	PPM
BENZO (A) PYRENE	11528-1	S		<10	PPM
INDENO (1,2,3-C,D) PYRENE	11528-1	S		<200	PPM
DIBENZO (A,H) ANTHRACENE	11528-1	S		<200	PPM
BENZO (GHI) PERYLENE	11528-1	S		<200	PPM
CHLOROMETHANE	11528-1	S		<1	PPM
BROMOMETHANE	11528-1	S		<1	PPM
VINYL CHLORIDE	11528-1	S		<1	PPM
CHLOROETHANE	11528-1	S		<1	PPM
METHYLENE CHLORIDE	11528-1	S		44	PPM
1,1-DICHLOROETHENE	11528-1	S		4.3	PPM
1,1-DICHLOROETHANE	11528-1	S		11	PPM
TRANS-1,2-DICHLOROETHENE	11528-1	S		46	PPM
CHLOROFORM	11528-1	S		<1	PPM
1,2-DICHLOROETHANE	11528-1	S		<1	PPM
1,1,1-TRICHLOROETHANE	11528-1	S		44	PPM
CARBON TETRACHLORIDE	11528-1	S		<1	PPM
BROMODICHLOROMETHANE	11528-1	S		<1	PPM
1,2-DICHLOROPROPANE	11528-1	S		<1	PPM
TRANS-1,3-DICHLOROPROPENE	11528-1	S		<1	PPM
TRICHLOROETHENE	11528-1	S		12	PPM
BENZENE	11528-1	S		8.3	PPM
DIBROMOCHLOROMETHANE	11528-1	S		<1	PPM
1,1,2-TRICHLOROETHANE	11528-1	S		<1	PPM
CIS-1,3-DICHLOROPROPENE	11528-1	S		<1	PPM
2-CHLOROETHYL VINYL ETHER	11528-1	S		<1	PPM
BROMOFORM	11528-1	S		<1	PPM
1,1,2,2-TETRACHLOROETHANE	11528-1	S		9.4	PPM
TETRACHLOROETHENE	11528-1	S		43	PPM
TOLUENE	11528-1	S		110	PPM
CHLOROBENZENE	11528-1	S		<1	PPM
ETHYL BENZENE	11528-1	S		50	PPM
ALDRIN	11528-1	S		<1	PPM
ALPHA BHC	11528-1	S		<1	PPM
BETA BHC	11528-1	S		<5	PPM
GAMMA BHC	11528-1	S		<5	PPM
DELTA BHC	11528-1	S		<5	PPM
CHLORDANE	11528-1	S		<10	PPM
DIELDRIN	11528-1	S		<5	PPM
P,P'-DDE	11528-1	S		<5	PPM
P,P'-DDT	11528-1	S		<5	PPM
P,P'DDD	11528-1	S		<5	PPM
ENDOSULFAN I	11528-1	S		<10	PPM
ENDOSULFAN II	11528-1	S		<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK C-5					
ENDOSULFAN SULFATE	11528-1	S		<10	PPM
ENDRIN	11528-1	S		<5	PPM
ENDRIN ALDEHYDE	11528-1	S		<10	PPM
HEPTACHLOR	11528-1	S		<1	PPM
HEPTACHLOR EPOXIDE	11528-1	S		<5	PPM
TOXAPHENE	11528-1	S		<10	PPM
PCB'S, AROCLOR 1254	11528-1	S		<5	PPM
ARSENIC	11528-1	S		20	PPM
CADMIUM	11528-1	S		16	PPM
CHROMIUM	11528-1	S		410	PPM
LEAD	11528-1	S		6,900	PPM
MERCURY	11528-1	S		<0.2	PPM
SELENIUM	11528-1	S		<1	PPM
SILVER	11528-1	S		<5	PPM
CYANIDE	11528-1	S		14	PPM
ANTIMONY	11528-1	S		<5	PPM
BERYLLIUM	11528-1	S		<1	PPM
COPPER	11528-1	S		1,000	PPM
NICKEL	11528-1	S		210	PPM
THALLIUM	11528-1	S		54	PPM
ZINC	11528-1	S		4,200	PPM
PHENOLICS, AS PHENOL	11528-1	S		95	PPM
ASH	11528-1	S		110,000	PPM
HEAT OF COMBUSTION	11528-1	S		9,100	BTU/LB
PHENOL	11528-1	S	D	52	PPM
2-CHLOROPHENOL	11528-1	S	D	<50	PPM
2-NITROPHENOL	11528-1	S	D	<50	PPM
2,4-DIMETHYLPHENOL	11528-1	S	D	<50	PPM
2,4-DICHLOROPHENOL	11528-1	S	D	<50	PPM
4-CHLORO-3-METHYL-PHENOL	11528-1	S	D	<50	PPM
2,4,6-TRICHLOROPHENOL	11528-1	S	D	<50	PPM
2,4-DINITROPHENOL	11528-1	S	D	<500	PPM
4-NITROPHENOL	11528-1	S	D	<50	PPM
2-METHYL-4,6-DINITROPHENOL	11528-1	S	D	<500	PPM
PENTACHLOROPHENOL	11528-1	S	D	<50	PPM
BIS(CHLOROETHYL) ETHER	11528-1	S	D	<10	PPM
1,2-DICHLOROBENZENE	11528-1	S	D	<10	PPM
1,4-DICHLOROBENZENE	11528-1	S	D	<10	PPM
1,3-DICHLOROBENZENE	11528-1	S	D	<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11528-1	S	D	<10	PPM
N-NITROSODIPROPYL AMINE	11528-1	S	D	<10	PPM
HEXACHLOROETHANE	11528-1	S	D	<10	PPM
NITROBENZENE	11528-1	S	D	<10	PPM
ISOPHORONE	11528-1	S	D	<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11528-1	S	D	<10	PPM
1,2,4-TRICHLOROBENZENE	11528-1	S	D	<10	PPM
NAPHTHALENE	11528-1	S	D	1,000	PPM
HEXACHLOROBUTADIENE	11528-1	S	D	<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK C-5					
HEXACHLOROCYCLOPENTADIENE	11528-1	S	D	<10	PPM
2-CHLORONAPHTHALENE	11528-1	S	D	<10	PPM
DIMETHYL PHTHALATE	11528-1	S	D	<10	PPM
2,6-DINITROTOLUENE	11528-1	S	D	<10	PPM
ACENAPHTHYLENE	11528-1	S	D	<10	PPM
ACENAPHTHENE	11528-1	S	D	140	PPM
2,4-DINITROTOLUENE	11528-1	S	D	<10	PPM
DIETHYL PHTHALATE	11528-1	S	D	<10	PPM
N-NITROSODIMETHYL AMINE	11528-1	S	D	<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11528-1	S	D	<10	PPM
FLUORENE	11528-1	S	D	<10	PPM
AZOBENZENE	11528-1	S	D	<10	PPM
N-NITROSODIPHENYL AMINE	11528-1	S	D	<10	PPM
4-BROMOPHENYLPHENYL ETHER	11528-1	S	D	<10	PPM
HEXACHLOROBENZENE	11528-1	S	D	<10	PPM
PHENANTHRENE	11528-1	S	D	610	PPM
ANTHRACENE	11528-1	S	D	130	PPM
DIBUTYL PHTHALATE	11528-1	S	D	260	PPM
FLUORANTHENE	11528-1	S	D	340	PPM
BENZIDINE	11528-1	S	D	<300	PPM
PYRENE	11528-1	S	D	330	PPM
BUTYLBENZYL PHTHALATE	11528-1	S	D	<10	PPM
3,3'-DICHLOROBENZIDINE	11528-1	S	D	<300	PPM
BENZO (A) ANTHRACENE	11528-1	S	D	160	PPM
CHRYSENE	11528-1	S	D	<10	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11528-1	S	D	600	PPM
DIOCTYL PHTHALATE	11528-1	S	D	<10	PPM
BENZO (K) FLUORANTHENE	11528-1	S	D	<10	PPM
BENZO (B) FLUORANTHENE	11528-1	S	D	<10	PPM
BENZO (A) PYRENE	11528-1	S	D	<10	PPM
INDENO (1,2,3-C,D) PYRENE	11528-1	S	D	<200	PPM
DIBENZO (A,H) ANTHRACENE	11528-1	S	D	<200	PPM
BENZO (GHI) PERYLENE	11528-1	S	D	<200	PPM
ALDRIN	11528-1	S	D	<1	PPM
ALPHA BHC	11528-1	S	D	<1	PPM
BETA BHC	11528-1	S	D	<5	PPM
GAMMA BHC	11528-1	S	D	<5	PPM
DELTA BHC	11528-1	S	D	<5	PPM
CHLORDANE	11528-1	S	D	<10	PPM
DIELDRIN	11528-1	S	D	<5	PPM
P,P'-DDE	11528-1	S	D	<5	PPM
P,P'-DDT	11528-1	S	D	<5	PPM
P,P'DDD	11528-1	S	D	<5	PPM
ENDOSULFAN I	11528-1	S	D	<10	PPM
ENDOSULFAN II	11528-1	S	D	<10	PPM
ENDOSULFAN SULFATE	11528-1	S	D	<10	PPM
ENDRIN	11528-1	S	D	<5	PPM
ENDRIN ALDEHYDE	11528-1	S	D	<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK C-5					
HEPTACHLOR	11528-1	S	D	<1	PPM
HEPTACHLOR EPOXIDE	11528-1	S	D	<5	PPM
TOXAPHENE	11528-1	S	D	<10	PPM
PCB'S, AROCLOR 1254	11528-1	S	D	<5	PPM
ARSENIC	11528-1	S	D	19	PPM
CADMIUM	11528-1	S	D	14	PPM
CHROMIUM	11528-1	S	D	410	PPM
LEAD	11528-1	S	D	7,200	PPM
MERCURY	11528-1	S	D	<0.2	PPM
SELENIUM	11528-1	S	D	<1	PPM
SILVER	11528-1	S	D	<5	PPM
ANTIMONY	11528-1	S	D	<5	PPM
BERYLLIUM	11528-1	S	D	<1	PPM
COPPER	11528-1	S	D	1,000	PPM
NICKEL	11528-1	S	D	200	PPM
THALLIUM	11528-1	S	D	81	PPM
ZINC	11528-1	S	D	4,400	PPM
ASH	11528-1	S	D	130,000	PPM
HEAT OF COMBUSTION	11528-1	S	D	9,200	BTU/LB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-8					
PHENOL	11424-4	A		29	PPM
2-CHLOROPHENOL	11424-4	A		<0.01	PPM
2-NITROPHENOL	11424-4	A		<0.01	PPM
2,4-DIMETHYLPHENOL	11424-4	A		6.1	PPM
2,4-DICHLOROPHENOL	11424-4	A		0.34	PPM
4-CHLORO-3-METHYL-PHENOL	11424-4	A		<0.01	PPM
2,4,6-TRICHLOROPHENOL	11424-4	A		<0.01	PPM
2,4-DINITROPHENOL	11424-4	A		<0.1	PPM
4-NITROPHENOL	11424-4	A		<0.01	PPM
2-METHYL-4,6-DINITROPHENOL	11424-4	A		<0.1	PPM
PENTACHLOROPHENOL	11424-4	A		<0.01	PPM
BIS(CHLOROETHYL) ETHER	11424-4	A		<0.002	PPM
1,2-DICHLOROBENZENE	11424-4	A		<0.002	PPM
1,4-DICHLOROBENZENE	11424-4	A		<0.002	PPM
1,3-DICHLOROBENZENE	11424-4	A		<0.002	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11424-4	A		<0.002	PPM
N-NITROSODIPROPYL AMINE	11424-4	A		<0.002	PPM
HEXACHLOROETHANE	11424-4	A		<0.002	PPM
NITROBENZENE	11424-4	A		<0.002	PPM
ISOPHORONE	11424-4	A		0.22	PPM
BIS(2-CHLOROETHOXY) METHANE	11424-4	A		<0.002	PPM
1,2,4-TRICHLOROBENZENE	11424-4	A		<0.002	PPM
NAPHTHALENE	11424-4	A		2.6	PPM
HEXACHLOROBUTADIENE	11424-4	A		<0.002	PPM
HEXACHLOROCYCLOPENTADIENE	11424-4	A		<0.002	PPM
2-CHLORONAPHTHALENE	11424-4	A		<0.002	PPM
DIMETHYL PHTHALATE	11424-4	A		<0.002	PPM
2,6-DINITROTOLUENE	11424-4	A		<0.002	PPM
ACENAPHTHYLENE	11424-4	A		0.14	PPM
ACENAPHTHENE	11424-4	A		0.092	PPM
2,4-DINITROTOLUENE	11424-4	A		<0.002	PPM
DIETHYL PHTHALATE	11424-4	A		<0.002	PPM
N-NITROSODIMETHYL AMINE	11424-4	A		<0.002	PPM
4-CHLOROPHENYLPHENYL ETHER	11424-4	A		<0.002	PPM
FLUORENE	11424-4	A		0.14	PPM
AZOBENZENE	11424-4	A		<0.002	PPM
N-NITROSODIPHENYL AMINE	11424-4	A		<0.002	PPM
4-BROMOPHENYLPHENYL ETHER	11424-4	A		<0.002	PPM
HEXACHLOROBENZENE	11424-4	A		<0.002	PPM
PHENANTHRENE	11424-4	A		0.57	PPM
ANTHRACENE	11424-4	A		<0.002	PPM
DIBUTYL PHTHALATE	11424-4	A		0.002	PPM
FLUORANTHENE	11424-4	A		<0.0073	PPM
BENZIDINE	11424-4	A		<0.06	PPM
PYRENE	11424-4	A		<0.22	PPM
BUTYLBENZYL PHTHALATE	11424-4	A		<0.002	PPM
3,3'-DICHLOROBENZIDINE	11424-4	A		<0.06	PPM
BENZO (A) ANTHRACENE	11424-4	A		<0.002	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-8					
CHRYSENE	11424-4	A		<0.002	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11424-4	A		<0.002	PPM
DIOCTYL PHTHALATE	11424-4	A		<0.002	PPM
BENZO (K) FLUORANTHENE	11424-4	A		<0.002	PPM
BENZO (B) FLUORANTHENE	11424-4	A		<0.002	PPM
BENZO (A) PYRENE	11424-4	A		<0.002	PPM
INDENO (1,2,3-C,D) PYRENE	11424-4	A		<0.04	PPM
DIBENZO (A,H) ANTHRACENE	11424-4	A		<0.04	PPM
BENZO (GHI) PERYLENE	11424-4	A		<0.04	PPM
CHLOROMETHANE	11424-4	A		<0.05	PPM
BROMOMETHANE	11424-4	A		<0.05	PPM
VINYL CHLORIDE	11424-4	A		<0.05	PPM
CHLOROETHANE	11424-4	A		<0.05	PPM
METHYLENE CHLORIDE	11424-4	A		13	PPM
1,1-DICHLOROETHENE	11424-4	A		<0.05	PPM
1,1-DICHLOROETHANE	11424-4	A		<0.05	PPM
TRANS-1,2-DICHLOROETHENE	11424-4	A		<0.05	PPM
CHLOROFORM	11424-4	A		2.0	PPM
1,2-DICHLOROETHANE	11424-4	A		<0.05	PPM
1,1,1-TRICHLOROETHANE	11424-4	A		<0.05	PPM
CARBON TETRACHLORIDE	11424-4	A		<0.05	PPM
BROMODICHLOROMETHANE	11424-4	A		<0.05	PPM
1,2-DICHLOROPROPANE	11424-4	A		<0.05	PPM
TRANS-1,3-DICHLOROPROPENE	11424-4	A		<0.05	PPM
TRICHLOROETHENE	11424-4	A		1.7	PPM
BENZENE	11424-4	A		1.2	PPM
DIBROMOCHLOROMETHANE	11424-4	A		<0.05	PPM
1,1,2-TRICHLOROETHANE	11424-4	A		<0.05	PPM
CIS-1,3-DICHLOROPROPENE	11424-4	A		<0.05	PPM
2-CHLOROETHYL VINYL ETHER	11424-4	A		<0.05	PPM
BROMOFORM	11424-4	A		<0.05	PPM
1,1,2,2-TETRACHLOROETHANE	11424-4	A		<0.05	PPM
TETRACHLOROETHENE	11424-4	A		0.1	PPM
TOLUENE	11424-4	A		1.2	PPM
CHLOROBENZENE	11424-4	A		<0.05	PPM
ETHYL BENZENE	11424-4	A		2.3	PPM
DICHLORODIFLUOROMETHANE	11424-4	A		<0.5	PPM
TRICHLOROFLUOROMETHANE	11424-4	A		<0.05	PPM
ALDRIN	11424-4	A		<0.001	PPM
ALPHA BHC	11424-4	A		<0.001	PPM
BETA BHC	11424-4	A		<0.01	PPM
GAMMA BHC	11424-4	A		<0.005	PPM
DELTA BHC	11424-4	A		<0.005	PPM
CHLORDANE	11424-4	A		<0.01	PPM
DIELDRIN	11424-4	A		<0.005	PPM
P,P'-DDE	11424-4	A		<0.005	PPM
P,P'-DDT	11424-4	A		<0.005	PPM
P,P'DDD	11424-4	A		<0.01	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-8					
ENDOSULFAN I	11424-4	A		<0.01	PPM
ENDOSULFAN II	11424-4	A		<0.01	PPM
ENDOSULFAN SULFATE	11424-4	A		<0.01	PPM
ENDRIN	11424-4	A		<0.005	PPM
ENDRIN ALDEHYDE	11424-4	A		<0.01	PPM
HEPTACHLOR	11424-4	A		<0.01	PPM
HEPTACHLOR EPOXIDE	11424-4	A		<0.005	PPM
TOXAPHENE	11424-4	A		<0.01	PPM
PCB'S, AROCLOR 1254	11424-4	A		<0.015	PPM
ARSENIC	11424-4	A		<0.5	PPM
CADMIUM	11424-4	A		<0.1	PPM
CHROMIUM	11424-4	A		0.12	PPM
LEAD	11424-4	A		<0.5	PPM
MERCURY	11424-4	A		<0.2	PPM
SELENIUM	11424-4	A		<0.2	PPM
SILVER	11424-4	A		<0.5	PPM
CYANIDE	11424-4	A		<1	PPM
ANTIMONY	11424-4	A		<0.05	PPM
BERYLLIUM	11424-4	A		0.01	PPM
COPPER	11424-4	A		0.13	PPM
NICKEL	11424-4	A		1.1	PPM
THALLIUM	11424-4	A		<10	PPM
ZINC	11424-4	A		1.3	PPM
PHENOLICS, AS PHENOL	11424-4	A		99	PPM
TOTAL ORGANIC CARBON	11424-4	A		1,600	PPM
OIL & GREASE	11424-4	A		15,000	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-10					
PHENOL	11424-5	S		<50	PPM
2-CHLOROPHENOL	11424-5	S		<50	PPM
2-NITROPHENOL	11424-5	S		<50	PPM
2,4-DIMETHYLPHENOL	11424-5	S		<50	PPM
2,4-DICHLOROPHENOL	11424-5	S		<50	PPM
4-CHLORO-3-METHYL-PHENOL	11424-5	S		<50	PPM
2,4,6-TRICHLOROPHENOL	11424-5	S		<50	PPM
2,4-DINITROPHENOL	11424-5	S		<500	PPM
4-NITROPHENOL	11424-5	S		<50	PPM
2-METHYL-4,6-DINITROPHENOL	11424-5	S		<500	PPM
PENTACHLOROPHENOL	11424-5	S		<50	PPM
BIS(CHLOROETHYL) ETHER	11424-5	S		<10	PPM
1,2-DICHLOROBENZENE	11424-5	S		<10	PPM
1,4-DICHLOROBENZENE	11424-5	S		<10	PPM
1,3-DICHLOROBENZENE	11424-5	S		<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11424-5	S		<10	PPM
N-NITROSODIPROPYL AMINE	11424-5	S		<10	PPM
HEXACHLOROETHANE	11424-5	S		<10	PPM
NITROBENZENE	11424-5	S		<10	PPM
ISOPHORONE	11424-5	S		<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11424-5	S		<10	PPM
1,2,4-TRICHLOROBENZENE	11424-5	S		<10	PPM
NAPHTHALENE	11424-5	S		670	PPM
HEXACHLOROBUTADIENE	11424-5	S		<10	PPM
HEXACHLOROCYCLOPENTADIENE	11424-5	S		<10	PPM
2-CHLORONAPHTHALENE	11424-5	S		<10	PPM
DIMETHYL PHTHALATE	11424-5	S		<10	PPM
2,6-DINITROTOLUENE	11424-5	S		<10	PPM
ACENAPHTHYLENE	11424-5	S		<10	PPM
ACENAPHTHENE	11424-5	S		<10	PPM
2,4-DINITROTOLUENE	11424-5	S		<10	PPM
DIETHYL PHTHALATE	11424-5	S		<10	PPM
N-NITROSODIMETHYL AMINE	11424-5	S		<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11424-5	S		<10	PPM
FLUORENE	11424-5	S		<10	PPM
AZOBENZENE	11424-5	S		<10	PPM
N-NITROSODIPHENYL AMINE	11424-5	S		<10	PPM
4-BROMOPHENYLPHENYL ETHER	11424-5	S		<10	PPM
HEXACHLOROBENZENE	11424-5	S		<10	PPM
PHENANTHRENE	11424-5	S		370	PPM
ANTHRACENE	11424-5	S		<10	PPM
DIBUTYL PHTHALATE	11424-5	S		<10	PPM
FLUORANTHENE	11424-5	S		<10	PPM
BENZIDINE	11424-5	S		<300	PPM
PYRENE	11424-5	S		170	PPM
BUTYLBENZYL PHTHALATE	11424-5	S		<10	PPM
3,3'-DICHLOROBENZIDINE	11424-5	S		<300	PPM
BENZO (A) ANTHRACENE	11424-5	S		<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-10					
CHRYSENE	11424-5	S		<10	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11424-5	S		<10	PPM
DIOCTYL PHTHALATE	11424-5	S		<10	PPM
BENZO (K) FLUORANTHENE	11424-5	S		<10	PPM
BENZO (B) FLUORANTHENE	11424-5	S		<10	PPM
BENZO (A) PYRENE	11424-5	S		<10	PPM
INDENO (1,2,3-C,D) PYRENE	11424-5	S		<200	PPM
DIBENZO (A,H) ANTHRACENE	11424-5	S		<200	PPM
BENZO (GHI) PERYLENE	11424-5	S		<200	PPM
CHLOROMETHANE	11424-5	S		<10	PPM
BROMOMETHANE	11424-5	S		<10	PPM
VINYL CHLORIDE	11424-5	S		<10	PPM
CHLOROETHANE	11424-5	S		<10	PPM
METHYLENE CHLORIDE	11424-5	S		<10	PPM
1,1-DICHLOROETHENE	11424-5	S		<10	PPM
1,1-DICHLOROETHANE	11424-5	S		<10	PPM
TRANS-1,2-DICHLOROETHENE	11424-5	S		<10	PPM
CHLOROFORM	11424-5	S		<10	PPM
1,2-DICHLOROETHANE	11424-5	S		<10	PPM
1,1,1-TRICHLOROETHANE	11424-5	S		1,000	PPM
CARBON TETRACHLORIDE	11424-5	S		<10	PPM
BROMODICHLOROMETHANE	11424-5	S		<10	PPM
1,2-DICHLOROPROPANE	11424-5	S		<10	PPM
TRANS-1,3-DICHLOROPROPENE	11424-5	S		<10	PPM
TRICHLOROETHENE	11424-5	S		330	PPM
BENZENE	11424-5	S		<10	PPM
DIBROMOCHLOROMETHANE	11424-5	S		<10	PPM
1,1,2-TRICHLOROETHANE	11424-5	S		<10	PPM
CIS-1,3-DICHLOROPROPENE	11424-5	S		<10	PPM
2-CHLOROETHYL VINYL ETHER	11424-5	S		<10	PPM
BROMOFORM	11424-5	S		<10	PPM
1,1,2,2-TETRACHLOROETHANE	11424-5	S		<10	PPM
TETRACHLOROETHENE	11424-5	S		640	PPM
TOLUENE	11424-5	S		1,000	PPM
CHLOROBENZENE	11424-5	S		<10	PPM
ETHYL BENZENE	11424-5	S		320	PPM
DICHLORODIFLUOROMETHANE	11424-5	S		<100	PPM
TRICHLOROFLUOROMETHANE	11424-5	S		<10	PPM
ALDRIN	11424-5	S		<1	PPM
ALPHA BHC	11424-5	S		<1	PPM
BETA BHC	11424-5	S		<5	PPM
GAMMA BHC	11424-5	S		<5	PPM
DELTA BHC	11424-5	S		<5	PPM
CHLORDANE	11424-5	S		<10	PPM
DIELDRIN	11424-5	S		<5	PPM
P,P'-DDE	11424-5	S		<5	PPM
P,P'-DDT	11424-5	S		<5	PPM
P,P'DDD	11424-5	S		<5	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-10					
ENDOSULFAN I	11424-5	S		<10	PPM
ENDOSULFAN II	11424-5	S		<10	PPM
ENDOSULFAN SULFATE	11424-5	S		<10	PPM
ENDRIN	11424-5	S		<5	PPM
ENDRIN ALDEHYDE	11424-5	S		<10	PPM
HEPTACHLOR	11424-5	S		<1	PPM
HEPTACHLOR EPOXIDE	11424-5	S		<5	PPM
TOXAPHENE	11424-5	S		<10	PPM
PCB'S, AROCLOR 1254	11424-5	S		<5	PPM
ARSENIC	11424-5	S		8.6	PPM
CADMIUM	11424-5	S		17	PPM
CHROMIUM	11424-5	S		320	PPM
LEAD	11424-5	S		1,100	PPM
MERCURY	11424-5	S		<0.2	PPM
SELENIUM	11424-5	S		<1	PPM
SILVER	11424-5	S		<5	PPM
CYANIDE	11424-5	S		12	PPM
ANTIMONY	11424-5	S		<5	PPM
BERYLLIUM	11424-5	S		<1	PPM
COPPER	11424-5	S		900	PPM
NICKEL	11424-5	S		81	PPM
THALLIUM	11424-5	S		<10	PPM
ZINC	11424-5	S		4,300	PPM
PHENOLICS, AS PHENOL	11424-5	S		140	PPM
TOTAL ORGANIC CARBON	11424-5	S		31,000	PPM
OIL & GREASE	11424-5	S		180	PPM
PHENOL	11424-5	S	D	<50	PPM
2-CHLOROPHENOL	11424-5	S	D	<50	PPM
2-NITROPHENOL	11424-5	S	D	<50	PPM
2,4-DIMETHYLPHENOL	11424-5	S	D	<50	PPM
2,4-DICHLOROPHENOL	11424-5	S	D	<50	PPM
4-CHLORO-3-METHYL-PHENOL	11424-5	S	D	<50	PPM
2,4,6-TRICHLOROPHENOL	11424-5	S	D	<50	PPM
2,4-DINITROPHENOL	11424-5	S	D	<500	PPM
4-NITROPHENOL	11424-5	S	D	<50	PPM
2-METHYL-4,6-DINITROPHENOL	11424-5	S	D	<500	PPM
PENTACHLOROPHENOL	11424-5	S	D	<50	PPM
BIS(CHLOROETHYL) ETHER	11424-5	S	D	<10	PPM
1,2-DICHLOROBENZENE	11424-5	S	D	<10	PPM
1,4-DICHLOROBENZENE	11424-5	S	D	<10	PPM
1,3-DICHLOROBENZENE	11424-5	S	D	<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11424-5	S	D	<10	PPM
N-NITROSODIPROPYL AMINE	11424-5	S	D	<10	PPM
HEXACHLOROETHANE	11424-5	S	D	<10	PPM
NITROBENZENE	11424-5	S	D	<10	PPM
ISOPHORONE	11424-5	S	D	<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11424-5	S	D	<10	PPM
1,2,4-TRICHLOROBENZENE	11424-5	S	D	<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-10					
NAPHTHALENE	11424-5	S	D	640	PPM
HEXACHLOROBUTADIENE	11424-5	S	D	<10	PPM
HEXACHLOROCYCLOPENTADIENE	11424-5	S	D	<10	PPM
2-CHLORONAPHTHALENE	11424-5	S	D	<10	PPM
DIMETHYL PHTHALATE	11424-5	S	D	<10	PPM
2,6-DINITROTOLUENE	11424-5	S	D	<10	PPM
ACENAPHTHYLENE	11424-5	S	D	<10	PPM
ACENAPHTHENE	11424-5	S	D	<10	PPM
2,4-DINITROTOLUENE	11424-5	S	D	<10	PPM
DIETHYL PHTHALATE	11424-5	S	D	<10	PPM
N-NITROSODIMETHYL AMINE	11424-5	S	D	<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11424-5	S	D	<10	PPM
FLUORENE	11424-5	S	D	<10	PPM
AZOBENZENE	11424-5	S	D	<10	PPM
N-NITROSODIPHENYL AMINE	11424-5	S	D	<10	PPM
4-BROMOPHENYLPHENYL ETHER	11424-5	S	D	<10	PPM
HEXACHLOROBENZENE	11424-5	S	D	<10	PPM
PHENANTHRENE	11424-5	S	D	410	PPM
ANTHRACENE	11424-5	S	D	<10	PPM
DIBUTYL PHTHALATE	11424-5	S	D	<10	PPM
FLUORANTHENE	11424-5	S	D	<10	PPM
BENZIDINE	11424-5	S	D	<300	PPM
PYRENE	11424-5	S	D	230	PPM
BUTYLBENZYL PHTHALATE	11424-5	S	D	<10	PPM
3,3'-DICHLOROBENZIDINE	11424-5	S	D	<300	PPM
BENZO (A) ANTHRACENE	11424-5	S	D	<10	PPM
CHRYSENE	11424-5	S	D	<10	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11424-5	S	D	<10	PPM
DIOCTYL PHTHALATE	11424-5	S	D	<10	PPM
BENZO (K) FLUORANTHENE	11424-5	S	D	<10	PPM
BENZO (B) FLUORANTHENE	11424-5	S	D	<10	PPM
BENZO (A) PYRENE	11424-5	S	D	<10	PPM
INDENO (1,2,3-C,D) PYRENE	11424-5	S	D	<200	PPM
DIBENZO (A,H) ANTHRACENE	11424-5	S	D	<200	PPM
BENZO (GHI) PERYLENE	11424-5	S	D	<200	PPM
ALDRIN	11424-5	S	D	<1	PPM
ALPHA BHC	11424-5	S	D	<1	PPM
BETA BHC	11424-5	S	D	<5	PPM
GAMMA BHC	11424-5	S	D	<5	PPM
DELTA BHC	11424-5	S	D	<5	PPM
CHLORDANE	11424-5	S	D	<10	PPM
DIELDRIN	11424-5	S	D	<5	PPM
P,P'-DDE	11424-5	S	D	<5	PPM
P,P'-DDT	11424-5	S	D	<5	PPM
P,P'DDD	11424-5	S	D	<5	PPM
ENDOSULFAN I	11424-5	S	D	<10	PPM
ENDOSULFAN II	11424-5	S	D	<10	PPM
ENDOSULFAN SULFATE	11424-5	S	D	<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-10					
ENDRIN	11424-5	S	D	<5	PPM
ENDRIN ALDEHYDE	11424-5	S	D	<10	PPM
HEPTACHLOR	11424-5	S	D	<1	PPM
HEPTACHLOR EPOXIDE	11424-5	S	D	<5	PPM
TOXAPHENE	11424-5	S	D	<10	PPM
PCB'S, AROCLOR 1254	11424-5	S	D	<5	PPM
TOTAL ORGANIC CARBON	11424-5	S	D	31,000	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-11					
PHENOL	11424-6	S		<50	PPM
2-CHLOROPHENOL	11424-6	S		<50	PPM
2-NITROPHENOL	11424-6	S		<50	PPM
2,4-DIMETHYLPHENOL	11424-6	S		<50	PPM
2,4-DICHLOROPHENOL	11424-6	S		<50	PPM
4-CHLORO-3-METHYL-PHENOL	11424-6	S		<50	PPM
2,4,6-TRICHLOROPHENOL	11424-6	S		<50	PPM
2,4-DINITROPHENOL	11424-6	S		<500	PPM
4-NITROPHENOL	11424-6	S		<50	PPM
2-METHYL-4,6-DINITROPHENOL	11424-6	S		<500	PPM
PENTACHLOROPHENOL	11424-6	S		<50	PPM
BIS(CHLOROETHYL) ETHER	11424-6	S		<10	PPM
1,2-DICHLOROBENZENE	11424-6	S		3,000	PPM
1,4-DICHLOROBENZENE	11424-6	S		<10	PPM
1,3-DICHLOROBENZENE	11424-6	S		<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11424-6	S		<10	PPM
N-NITROSODIPROPYL AMINE	11424-6	S		<10	PPM
HEXACHLOROETHANE	11424-6	S		<10	PPM
NITROBENZENE	11424-6	S		<10	PPM
ISOPHORONE	11424-6	S		<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11424-6	S		<10	PPM
1,2,4-TRICHLOROBENZENE	11424-6	S		<10	PPM
NAPHTHALENE	11424-6	S		73,000	PPM
HEXACHLOROBUTADIENE	11424-6	S		<10	PPM
HEXACHLOROCYCLOPENTADIENE	11424-6	S		<10	PPM
2-CHLORONAPHTHALENE	11424-6	S		<10	PPM
DIMETHYL PHTHALATE	11424-6	S		<10	PPM
2,6-DINITROTOLUENE	11424-6	S		<10	PPM
ACENAPHTHYLENE	11424-6	S		44	PPM
ACENAPHTHENE	11424-6	S		5,500	PPM
2,4-DINITROTOLUENE	11424-6	S		<10	PPM
DIETHYL PHTHALATE	11424-6	S		<10	PPM
N-NITROSODIMETHYL AMINE	11424-6	S		<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11424-6	S		<10	PPM
FLUORENE	11424-6	S		6,000	PPM
AZOBENZENE	11424-6	S		<10	PPM
N-NITROSODIPHENYL AMINE	11424-6	S		<10	PPM
4-BROMOPHENYLPHENYL ETHER	11424-6	S		<10	PPM
HEXACHLOROBENZENE	11424-6	S		<10	PPM
PHENANTHRENE	11424-6	S		20,000	PPM
ANTHRACENE	11424-6	S		3,700	PPM
DIBUTYL PHTHALATE	11424-6	S		<10	PPM
FLUORANTHENE	11424-6	S		9,500	PPM
BENZIDINE	11424-6	S		<300	PPM
PYRENE	11424-6	S		7,100	PPM
BUTYLBENZYL PHTHALATE	11424-6	S		<10	PPM
3,3'-DICHLOROBENZIDINE	11424-6	S		<300	PPM
BENZO (A) ANTHRACENE	11424-6	S		2,100	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-11					
CHRYSENE	11424-6	S		840	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11424-6	S		<10	PPM
DIOCTYL PHTHALATE	11424-6	S		<10	PPM
BENZO (K) FLUORANTHENE	11424-6	S		<10	PPM
BENZO (B) FLUORANTHENE	11424-6	S		1,000	PPM
BENZO (A) PYRENE	11424-6	S		20	PPM
INDENO (1,2,3-C,D) PYRENE	11424-6	S		<200	PPM
DIBENZO (A,H) ANTHRACENE	11424-6	S		<200	PPM
BENZO (GHI) PERYLENE	11424-6	S		<200	PPM
CHLOROMETHANE	11424-6	S		<10	PPM
BROMOMETHANE	11424-6	S		<10	PPM
VINYL CHLORIDE	11424-6	S		<10	PPM
CHLOROETHANE	11424-6	S		<10	PPM
METHYLENE CHLORIDE	11424-6	S		170	PPM
1,1-DICHLOROETHENE	11424-6	S		<10	PPM
1,1-DICHLOROETHANE	11424-6	S		290	PPM
TRANS-1,2-DICHLOROETHENE	11424-6	S		<10	PPM
CHLOROFORM	11424-6	S		<10	PPM
1,2-DICHLOROETHANE	11424-6	S		<10	PPM
1,1,1-TRICHLOROETHANE	11424-6	S		480	PPM
CARBON TETRACHLORIDE	11424-6	S		<10	PPM
BROMODICHLOROMETHANE	11424-6	S		<10	PPM
1,2-DICHLOROPROPANE	11424-6	S		<10	PPM
TRANS-1,3-DICHLOROPROPENE	11424-6	S		<10	PPM
TRICHLOROETHENE	11424-6	S		1,300	PPM
BENZENE	11424-6	S		1,000	PPM
DIBROMOCHLOROMETHANE	11424-6	S		<10	PPM
1,1,2-TRICHLOROETHANE	11424-6	S		<10	PPM
CIS-1,3-DICHLOROPROPENE	11424-6	S		<10	PPM
2-CHLOROETHYL VINYL ETHER	11424-6	S		<10	PPM
BROMOFORM	11424-6	S		<10	PPM
1,1,2,2-TETRACHLOROETHANE	11424-6	S		<10	PPM
TETRACHLOROETHENE	11424-6	S		800	PPM
TOLUENE	11424-6	S		3,800	PPM
CHLOROBENZENE	11424-6	S		<10	PPM
ETHYL BENZENE	11424-6	S		1,300	PPM
DICHLORODIFLUOROMETHANE	11424-6	S		<100	PPM
TRICHLOROFLUOROMETHANE	11424-6	S		<10	PPM
ALDRIN	11424-6	S		<1	PPM
ALPHA BHC	11424-6	S		<1	PPM
BETA BHC	11424-6	S		<5	PPM
GAMMA BHC	11424-6	S		<5	PPM
DELTA BHC	11424-6	S		<5	PPM
CHLORDANE	11424-6	S		<10	PPM
DIELDRIN	11424-6	S		<5	PPM
P,P'-DDE	11424-6	S		<5	PPM
P,P'-DDT	11424-6	S		<5	PPM
P,P'DDD	11424-6	S		<5	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-11					
ENDOSULFAN I	11424-6	S		<10	PPM
ENDOSULFAN II	11424-6	S		<10	PPM
ENDOSULFAN SULFATE	11424-6	S		<10	PPM
ENDRIN	11424-6	S		<5	PPM
ENDRIN ALDEHYDE	11424-6	S		<10	PPM
HEPTACHLOR	11424-6	S		<1	PPM
HEPTACHLOR EPOXIDE	11424-6	S		<5	PPM
TOXAPHENE	11424-6	S		<10	PPM
PCB'S, AROCLOR 1254	11424-6	S		<5	PPM
ARSENIC	11424-6	S		<5	PPM
CADMIUM	11424-6	S		13	PPM
CHROMIUM	11424-6	S		220	PPM
LEAD	11424-6	S		850	PPM
MERCURY	11424-6	S		0.88	PPM
SELENIUM	11424-6	S		<1	PPM
SILVER	11424-6	S		<5	PPM
CYANIDE	11424-6	S		81	PPM
ANTIMONY	11424-6	S		<5	PPM
BERYLLIUM	11424-6	S		<1	PPM
COPPER	11424-6	S		630	PPM
NICKEL	11424-6	S		74	PPM
THALLIUM	11424-6	S		<10	PPM
ZINC	11424-6	S		3,700	PPM
PHENOLICS, AS PHENOL	11424-6	S		430	PPM
TOTAL ORGANIC CARBON	11424-6	S		35,000	PPM
OIL & GREASE	11424-6	S		240,000	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-26					
PHENOL	11272-1	O		<50	PPM
2-CHLOROPHENOL	11272-1	O		<50	PPM
2-NITROPHENOL	11272-1	O		<50	PPM
2,4-DIMETHYLPHENOL	11272-1	O		<50	PPM
2,4-DICHLOROPHENOL	11272-1	O		<50	PPM
4-CHLORO-3-METHYL-PHENOL	11272-1	O		<50	PPM
2,4,6-TRICHLOROPHENOL	11272-1	O		<50	PPM
2,4-DINITROPHENOL	11272-1	O		<500	PPM
4-NITROPHENOL	11272-1	O		<50	PPM
2-METHYL-4,6-DINITROPHENOL	11272-1	O		<500	PPM
PENTACHLOROPHENOL	11272-1	O		<50	PPM
BIS(CHLOROETHYL) ETHER	11272-1	O		<10	PPM
1,2-DICHLOROBENZENE	11272-1	O		<10	PPM
1,4-DICHLOROBENZENE	11272-1	O		<10	PPM
1,3-DICHLOROBENZENE	11272-1	O		<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11272-1	O		<10	PPM
N-NITROSODIPROPYL AMINE	11272-1	O		<10	PPM
HEXACHLOROETHANE	11272-1	O		<10	PPM
NITROBENZENE	11272-1	O		<10	PPM
ISOPHORONE	11272-1	O		<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11272-1	O		<10	PPM
1,2,4-TRICHLOROBENZENE	11272-1	O		<10	PPM
NAPHTHALENE	11272-1	O		180	PPM
HEXACHLOROBUTADIENE	11272-1	O		<10	PPM
HEXACHLOROCYCLOPENTADIENE	11272-1	O		<10	PPM
2-CHLORONAPHTHALENE	11272-1	O		<10	PPM
DIMETHYL PHTHALATE	11272-1	O		<10	PPM
2,6-DINITROTOLUENE	11272-1	O		<10	PPM
ACENAPHTHYLENE	11272-1	O		<10	PPM
ACENAPHTHENE	11272-1	O		<10	PPM
2,4-DINITROTOLUENE	11272-1	O		<10	PPM
DIETHYL PHTHALATE	11272-1	O		<10	PPM
N-NITROSODIMETHYL AMINE	11272-1	O		<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11272-1	O		<10	PPM
FLUORENE	11272-1	O		<10	PPM
AZOBENZENE	11272-1	O		<10	PPM
N-NITROSODIPHENYL AMINE	11272-1	O		<10	PPM
4-BROMOPHENYLPHENYL ETHER	11272-1	O		<10	PPM
HEXACHLOROBENZENE	11272-1	O		<10	PPM
PHENANTHRENE	11272-1	O		1,000	PPM
ANTHRACENE	11272-1	O		<10	PPM
DIBUTYL PHTHALATE	11272-1	O		<10	PPM
FLUORANTHENE	11272-1	O		2,100	PPM
BENZIDINE	11272-1	O		<300	PPM
PYRENE	11272-1	O		1,800	PPM
BUTYLBENZYL PHTHALATE	11272-1	O		<10	PPM
3,3'-DICHLOROBENZIDINE	11272-1	O		<300	PPM
BENZO (A) ANTHRACENE	11272-1	O		740	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-26					
CHRYSENE	11272-1	O		<10	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11272-1	O		<10	PPM
DIOCTYL PHTHALATE	11272-1	O		<10	PPM
BENZO (K) FLUORANTHENE	11272-1	O		1,100	PPM
BENZO (B) FLUORANTHENE	11272-1	O		<10	PPM
BENZO (A) PYRENE	11272-1	O		<10	PPM
INDENO (1,2,3-C,D) PYRENE	11272-1	O		<200	PPM
DIBENZO (A,H) ANTHRACENE	11272-1	O		<200	PPM
BENZO (GHI) PERYLENE	11272-1	O		<200	PPM
CHLOROMETHANE	11272-1	O		<1	PPM
BROMOMETHANE	11272-1	O		<1	PPM
VINYL CHLORIDE	11272-1	O		<1	PPM
CHLOROETHANE	11272-1	O		<1	PPM
METHYLENE CHLORIDE	11272-1	O		9.4	PPM
1,1-DICHLOROETHENE	11272-1	O		<1	PPM
1,1-DICHLOROETHANE	11272-1	O		<1	PPM
TRANS-1,2-DICHLOROETHENE	11272-1	O		<1	PPM
CHLOROFORM	11272-1	O		<1	PPM
1,2-DICHLOROETHANE	11272-1	O		<1	PPM
1,1,1-TRICHLOROETHANE	11272-1	O		<1	PPM
CARBON TETRACHLORIDE	11272-1	O		<1	PPM
BROMODICHLOROMETHANE	11272-1	O		<1	PPM
1,2-DICHLOROPROPANE	11272-1	O		<1	PPM
TRANS-1,3-DICHLOROPROPENE	11272-1	O		<1	PPM
TRICHLOROETHENE	11272-1	O		<1	PPM
BENZENE	11272-1	O		2.6	PPM
DIBROMOCHLOROMETHANE	11272-1	O		<1	PPM
1,1,2-TRICHLOROETHANE	11272-1	O		<1	PPM
CIS-1,3-DICHLOROPROPENE	11272-1	O		<1	PPM
2-CHLOROETHYL VINYL ETHER	11272-1	O		<1	PPM
BROMOFORM	11272-1	O		<1	PPM
1,1,2,2-TETRACHLOROETHANE	11272-1	O		<1	PPM
TETRACHLOROETHENE	11272-1	O		<1	PPM
TOLUENE	11272-1	O		50	PPM
CHLOROBENZENE	11272-1	O		<1	PPM
ETHYL BENZENE	11272-1	O		47	PPM
DICHLORODIFLUOROMETHANE	11272-1	O		<10	PPM
TRICHLOROFLUOROMETHANE	11272-1	O		<1	PPM
ARSENIC	11272-1	O		<5	PPM
CADMIUM	11272-1	O		<1	PPM
CHROMIUM	11272-1	O		<5	PPM
LEAD	11272-1	O		160	PPM
MERCURY	11272-1	O		<0.2	PPM
SELENIUM	11272-1	O		<1	PPM
SILVER	11272-1	O		<5	PPM
CYANIDE	11272-1	O		<1	PPM
ANTIMONY	11272-1	O		<5	PPM
BERYLLIUM	11272-1	O		<1	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-26					
COPPER	11272-1	O		<5	PPM
NICKEL	11272-1	O		6.7	PPM
THALLIUM	11272-1	O		<10	PPM
ZINC	11272-1	O		120	PPM
PHENOLICS, AS PHENOL	11272-1	O		7.7	PPM
PCB'S, AROCLOR 1260	11272-1	O		<1	PPM
PHENOL	11272-1	O	D	<50	PPM
2-CHLOROPHENOL	11272-1	O	D	<50	PPM
2-NITROPHENOL	11272-1	O	D	<50	PPM
2,4-DIMETHYLPHENOL	11272-1	O	D	<50	PPM
2,4-DICHLOROPHENOL	11272-1	O	D	<50	PPM
4-CHLORO-3-METHYL-PHENOL	11272-1	O	D	<50	PPM
2,4,6-TRICHLOROPHENOL	11272-1	O	D	<50	PPM
2,4-DINITROPHENOL	11272-1	O	D	<500	PPM
4-NITROPHENOL	11272-1	O	D	<50	PPM
2-METHYL-4,6-DINITROPHENOL	11272-1	O	D	<500	PPM
PENTACHLOROPHENOL	11272-1	O	D	<50	PPM
BIS(CHLOROETHYL) ETHER	11272-1	O	D	<10	PPM
1,2-DICHLOROBENZENE	11272-1	O	D	<10	PPM
1,4-DICHLOROBENZENE	11272-1	O	D	<10	PPM
1,3-DICHLOROBENZENE	11272-1	O	D	<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11272-1	O	D	<10	PPM
N-NITROSODIPROPYL AMINE	11272-1	O	D	<10	PPM
HEXACHLOROETHANE	11272-1	O	D	<10	PPM
NITROBENZENE	11272-1	O	D	<10	PPM
ISOPHORONE	11272-1	O	D	<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11272-1	O	D	<10	PPM
1,2,4-TRICHLOROBENZENE	11272-1	O	D	<10	PPM
NAPHTHALENE	11272-1	O	D	270	PPM
HEXACHLOROBUTADIENE	11272-1	O	D	<10	PPM
HEXACHLOROCYCLOPENTADIENE	11272-1	O	D	<10	PPM
2-CHLORONAPHTHALENE	11272-1	O	D	<10	PPM
DIMETHYL PHTHALATE	11272-1	O	D	<10	PPM
2,6-DINITROTOLUENE	11272-1	O	D	<10	PPM
ACENAPHTHYLENE	11272-1	O	D	<10	PPM
ACENAPHTHENE	11272-1	O	D	<10	PPM
2,4-DINITROTOLUENE	11272-1	O	D	<10	PPM
DIETHYL PHTHALATE	11272-1	O	D	<10	PPM
N-NITROSODIMETHYL AMINE	11272-1	O	D	<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11272-1	O	D	<10	PPM
FLUORENE	11272-1	O	D	<10	PPM
AZOBENZENE	11272-1	O	D	<10	PPM
N-NITROSODIPHENYL AMINE	11272-1	O	D	<10	PPM
4-BROMOPHENYLPHENYL ETHER	11272-1	O	D	<10	PPM
HEXACHLOROBENZENE	11272-1	O	D	<10	PPM
PHENANTHRENE	11272-1	O	D	1,100	PPM
ANTHRACENE	11272-1	O	D	<10	PPM
DIBUTYL PHTHALATE	11272-1	O	D	<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-26					
FLUORANTHENE	11272-1	O	D	2,000	PPM
BENZIDINE	11272-1	O	D	<300	PPM
PYRENE	11272-1	O	D	1,700	PPM
BUTYLBENZYL PHTHALATE	11272-1	O	D	<10	PPM
3,3'-DICHLOROBENZIDINE	11272-1	O	D	<300	PPM
BENZO (A) ANTHRACENE	11272-1	O	D	680	PPM
CHRYSENE	11272-1	O	D	<10	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11272-1	O	D	<10	PPM
DIOCTYL PHTHALATE	11272-1	O	D	<10	PPM
BENZO (K) FLUORANTHENE	11272-1	O	D	1,100	PPM
BENZO (B) FLUORANTHENE	11272-1	O	D	<10	PPM
BENZO (A) PYRENE	11272-1	O	D	<10	PPM
INDENO (1,2,3-C,D) PYRENE	11272-1	O	D	<200	PPM
DIBENZO (A,H) ANTHRACENE	11272-1	O	D	<200	PPM
BENZO (GHI) PERYLENE	11272-1	O	D	<200	PPM
CYANIDE	11272-1	O	D	<1	PPM
PHENOLICS, AS PHENOL	11272-1	O	D	<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-27					
PHENOL	11272-2	O		<50	PPM
2-CHLOROPHENOL	11272-2	O		<50	PPM
2-NITROPHENOL	11272-2	O		<50	PPM
2,4-DIMETHYLPHENOL	11272-2	O		<50	PPM
2,4-DICHLOROPHENOL	11272-2	O		<50	PPM
4-CHLORO-3-METHYL-PHENOL	11272-2	O		<50	PPM
2,4,6-TRICHLOROPHENOL	11272-2	O		<50	PPM
2,4-DINITROPHENOL	11272-2	O		<500	PPM
4-NITROPHENOL	11272-2	O		<50	PPM
2-METHYL-4,6-DINITROPHENOL	11272-2	O		<500	PPM
PENTACHLOROPHENOL	11272-2	O		<50	PPM
BIS(CHLOROETHYL) ETHER	11272-2	O		<10	PPM
1,2-DICHLOROBENZENE	11272-2	O		<10	PPM
1,4-DICHLOROBENZENE	11272-2	O		<10	PPM
1,3-DICHLOROBENZENE	11272-2	O		<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11272-2	O		<10	PPM
N-NITROSODIPROPYL AMINE	11272-2	O		<10	PPM
HEXACHLOROETHANE	11272-2	O		<10	PPM
NITROBENZENE	11272-2	O		<10	PPM
ISOPHORONE	11272-2	O		<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11272-2	O.		<10	PPM
1,2,4-TRICHLOROBENZENE	11272-2	O		<10	PPM
NAPHTHALENE	11272-2	O		670	PPM
HEXACHLOROBUTADIENE	11272-2	O		<10	PPM
HEXACHLOROCYCLOPENTADIENE	11272-2	O		<10	PPM
2-CHLORONAPHTHALENE	11272-2	O		<10	PPM
DIMETHYL PHTHALATE	11272-2	O		<10	PPM
2,6-DINITROTOLUENE	11272-2	O		<10	PPM
ACENAPHTHYLENE	11272-2	O		<10	PPM
ACENAPHTHENE	11272-2	O		<10	PPM
2,4-DINITROTOLUENE	11272-2	O		<10	PPM
DIETHYL PHTHALATE	11272-2	O		<10	PPM
N-NITROSODIMETHYL AMINE	11272-2	O		<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11272-2	O		<10	PPM
FLUORENE	11272-2	O		<10	PPM
AZOBENZENE	11272-2	O		<10	PPM
N-NITROSODIPHENYL AMINE	11272-2	O		<10	PPM
4-BROMOPHENYLPHENYL ETHER	11272-2	O		<10	PPM
HEXACHLOROBENZENE	11272-2	O		<10	PPM
PHENANTHRENE	11272-2	O		400	PPM
ANTHRACENE	11272-2	O		<10	PPM
DIBUTYL PHTHALATE	11272-2	O		<10	PPM
FLUORANTHENE	11272-2	O		270	PPM
BENZIDINE	11272-2	O		<300	PPM
PYRENE	11272-2	O		240	PPM
BUTYLBENZYL PHTHALATE	11272-2	O		<10	PPM
3,3'-DICHLOROBENZIDINE	11272-2	O		<300	PPM
BENZO (A) ANTHRACENE	11272-2	O		<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-27					
CHRYSENE	11272-2	O		<10	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11272-2	O		<10	PPM
DIOCTYL PHTHALATE	11272-2	O		<10	PPM
BENZO (K) FLUORANTHENE	11272-2	O		<10	PPM
BENZO (B) FLUORANTHENE	11272-2	O		<10	PPM
BENZO (A) PYRENE	11272-2	O		<10	PPM
INDENO (1,2,3-C,D) PYRENE	11272-2	O		<200	PPM
DIBENZO (A,H) ANTHRACENE	11272-2	O		<200	PPM
BENZO (GHI) PERYLENE	11272-2	O		<200	PPM
CHLOROMETHANE	11272-2	O		<1	PPM
BROMOMETHANE	11272-2	O		<1	PPM
VINYL CHLORIDE	11272-2	O		<1	PPM
CHLOROETHANE	11272-2	O		<1	PPM
METHYLENE CHLORIDE	11272-2	O		14	PPM
1,1-DICHLOROETHENE	11272-2	O		<1	PPM
1,1-DICHLOROETHANE	11272-2	O		<1	PPM
TRANS-1,2-DICHLOROETHENE	11272-2	O		<1	PPM
CHLOROFORM	11272-2	O		<1	PPM
1,2-DICHLOROETHANE	11272-2	O		<1	PPM
1,1,1-TRICHLOROETHANE	11272-2	O		<1	PPM
CARBON TETRACHLORIDE	11272-2	O		<1	PPM
BROMODICHLOROMETHANE	11272-2	O		<1	PPM
1,2-DICHLOROPROPANE	11272-2	O		<1	PPM
TRANS-1,3-DICHLOROPROPENE	11272-2	O		<1	PPM
TRICHLOROETHENE	11272-2	O		<1	PPM
BENZENE	11272-2	O		6.8	PPM
DIBROMOCHLOROMETHANE	11272-2	O		<1	PPM
1,1,2-TRICHLOROETHANE	11272-2	O		<1	PPM
CIS-1,3-DICHLOROPROPENE	11272-2	O		<1	PPM
2-CHLOROETHYL VINYL ETHER	11272-2	O		<1	PPM
BROMOFORM	11272-2	O		<1	PPM
1,1,2,2-TETRACHLOROETHANE	11272-2	O		<1	PPM
TETRACHLOROETHENE	11272-2	O		<1	PPM
TOLUENE	11272-2	O		85	PPM
CHLOROBENZENE	11272-2	O		<1	PPM
ETHYL BENZENE	11272-2	O		47	PPM
DICHLORODIFLUOROMETHANE	11272-2	O		<10	PPM
TRICHLOROFLUOROMETHANE	11272-2	O		<1	PPM
ARSENIC	11272-2	O		<5	PPM
CADMIUM	11272-2	O		<1	PPM
CHROMIUM	11272-2	O		<5	PPM
LEAD	11272-2	O		<10	PPM
MERCURY	11272-2	O		<0.2	PPM
SELENIUM	11272-2	O		<1	PPM
SILVER	11272-2	O		<5	PPM
CYANIDE	11272-2	O		<1	PPM
ANTIMONY	11272-2	O		<5	PPM
BERYLLIUM	11272-2	O		<1	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK D-27					
COPPER	11272-2	O		<5	PPM
NICKEL	11272-2	O		<5	PPM
THALLIUM	11272-2	O		<10	PPM
ZINC	11272-2	O		<1	PPM
PHENOLICS, AS PHENOL	11272-2	O		16	PPM
PCB'S, AROCLOR 1260	11272-2	O		32	PPM
PCB'S, AROCLOR 1260	11272-2	O	D	32	PPM
PCB'S, AROCLOR 1260	11272-2	O	D	30	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK S-1					
PHENOL	11528-2	S		610	PPM
2-CHLOROPHENOL	11528-2	S		<50	PPM
2-NITROPHENOL	11528-2	S		<50	PPM
2,4-DIMETHYLPHENOL	11528-2	S		<50	PPM
2,4-DICHLOROPHENOL	11528-2	S		<50	PPM
4-CHLORO-3-METHYL-PHENOL	11528-2	S		<50	PPM
2,4,6-TRICHLOROPHENOL	11528-2	S		<50	PPM
2,4-DINITROPHENOL	11528-2	S		<500	PPM
4-NITROPHENOL	11528-2	S		<50	PPM
2-METHYL-4,6-DINITROPHENOL	11528-2	S		<500	PPM
PENTACHLOROPHENOL	11528-2	S		<50	PPM
BIS(CHLOROETHYL) ETHER	11528-2	S		<10	PPM
1,2-DICHLOROBENZENE	11528-2	S		<10	PPM
1,4-DICHLOROBENZENE	11528-2	S		<10	PPM
1,3-DICHLOROBENZENE	11528-2	S		<10	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11528-2	S		<10	PPM
N-NITROSODIPROPYL AMINE	11528-2	S		<10	PPM
HEXACHLOROETHANE	11528-2	S		<10	PPM
NITROBENZENE	11528-2	S		<10	PPM
ISOPHORONE	11528-2	S		<10	PPM
BIS(2-CHLOROETHOXY) METHANE	11528-2	S		<10	PPM
1,2,4-TRICHLOROBENZENE	11528-2	S		<10	PPM
NAPHTHALENE	11528-2	S		26,000	PPM
HEXACHLOROBUTADIENE	11528-2	S		<10	PPM
HEXACHLOROCYCLOPENTADIENE	11528-2	S		<10	PPM
2-CHLORONAPHTHALENE	11528-2	S		<10	PPM
DIMETHYL PHTHALATE	11528-2	S		<10	PPM
2,6-DINITROTOLUENE	11528-2	S		<10	PPM
ACENAPHTHYLENE	11528-2	S		3,400	PPM
ACENAPHTHENE	11528-2	S		8,000	PPM
2,4-DINITROTOLUENE	11528-2	S		<10	PPM
DIETHYL PHTHALATE	11528-2	S		<10	PPM
N-NITROSODIMETHYL AMINE	11528-2	S		<10	PPM
4-CHLOROPHENYLPHENYL ETHER	11528-2	S		<10	PPM
FLUORENE	11528-2	S		13,000	PPM
AZOBENZENE	11528-2	S		<10	PPM
N-NITROSODIPHENYL AMINE	11528-2	S		<10	PPM
4-BROMOPHENYLPHENYL ETHER	11528-2	S		<10	PPM
HEXACHLOROBENZENE	11528-2	S		<10	PPM
PHENANTHRENE	11528-2	S		34,000	PPM
ANTHRACENE	11528-2	S		25,000	PPM
DIBUTYL PHTHALATE	11528-2	S		340	PPM
FLUORANTHENE	11528-2	S		22,000	PPM
BENZIDINE	11528-2	S		<300	PPM
PYRENE	11528-2	S		15,000	PPM
BUTYLBENZYL PHTHALATE	11528-2	S		<10	PPM
3,3'-DICHLOROBENZIDINE	11528-2	S		<300	PPM
BENZO (A) ANTHRACENE	11528-2	S		<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK S-1					
CHRYSENE	11528-2	S		6,700	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11528-2	S		470	PPM
DIOCTYL PHTHALATE	11528-2	S		<10	PPM
BENZO (K) FLUORANTHENE	11528-2	S		<10	PPM
BENZO (B) FLUORANTHENE	11528-2	S		3,300	PPM
BENZO (A) PYRENE	11528-2	S		2,400	PPM
INDENO (1,2,3-C,D) PYRENE	11528-2	S		<200	PPM
DIBENZO (A,H) ANTHRACENE	11528-2	S		<200	PPM
BENZO (GHI) PERYLENE	11528-2	S		<200	PPM
CHLOROMETHANE	11528-2	S		<1	PPM
BROMOMETHANE	11528-2	S		<1	PPM
VINYL CHLORIDE	11528-2	S		<1	PPM
CHLOROETHANE	11528-2	S		<1	PPM
METHYLENE CHLORIDE	11528-2	S		2.7	PPM
1,1-DICHLOROETHENE	11528-2	S		<1	PPM
1,1-DICHLOROETHANE	11528-2	S		<1	PPM
TRANS-1,2-DICHLOROETHENE	11528-2	S		<1	PPM
CHLOROFORM	11528-2	S		<1	PPM
1,2-DICHLOROETHANE	11528-2	S		<1	PPM
1,1,1-TRICHLOROETHANE	11528-2	S		3.3	PPM
CARBON TETRACHLORIDE	11528-2	S		<1	PPM
BROMODICHLOROMETHANE	11528-2	S		<1	PPM
1,2-DICHLOROPROPANE	11528-2	S		<1	PPM
TRANS-1,3-DICHLOROPROPENE	11528-2	S		<1	PPM
TRICHLOROETHENE	11528-2	S		7.4	PPM
BENZENE	11528-2	S		24	PPM
DIBROMOCHLOROMETHANE	11528-2	S		<1	PPM
1,1,2-TRICHLOROETHANE	11528-2	S		<1	PPM
CIS-1,3-DICHLOROPROPENE	11528-2	S		<1	PPM
2-CHLOROETHYL VINYL ETHER	11528-2	S		<1	PPM
BROMOFORM	11528-2	S		<1	PPM
1,1,2,2-TETRACHLOROETHANE	11528-2	S		4.1	PPM
TETRACHLOROETHENE	11528-2	S		22	PPM
TOLUENE	11528-2	S		78	PPM
CHLOROBENZENE	11528-2	S		<1	PPM
ETHYL BENZENE	11528-2	S		24	PPM
ALDRIN	11528-2	S		<1	PPM
ALPHA BHC	11528-2	S		<1	PPM
BETA BHC	11528-2	S		<5	PPM
GAMMA BHC	11528-2	S		<5	PPM
DELTA BHC	11528-2	S		<5	PPM
CHLORDANE	11528-2	S		<10	PPM
DIELDRIN	11528-2	S		<5	PPM
P,P'-DDE	11528-2	S		<5	PPM
P,P'-DDT	11528-2	S		<5	PPM
P,P'DDD	11528-2	S		<5	PPM
ENDOSULFAN I	11528-2	S		<10	PPM
ENDOSULFAN II	11528-2	S		<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* TANK S-1					
ENDOSULFAN SULFATE	11528-2	S		<10	PPM
ENDRIN	11528-2	S		<5	PPM
ENDRIN ALDEHYDE	11528-2	S		<10	PPM
HEPTACHLOR	11528-2	S		<5	PPM
HEPTACHLOR EPOXIDE	11528-2	S		<5	PPM
TOXAPHENE	11528-2	S		<10	PPM
PCB'S, AROCLOR 1254	11528-2	S		<5	PPM
ARSENIC	11528-2	S		50	PPM
CADMIUM	11528-2	S		4.8	PPM
CHROMIUM	11528-2	S		190	PPM
LEAD	11528-2	S		2,600	PPM
MERCURY	11528-2	S		71	PPM
SELENIUM	11528-2	S		2.5	PPM
SILVER	11528-2	S		<5	PPM
CYANIDE	11528-2	S		9.4	PPM
ANTIMONY	11528-2	S		<5	PPM
BERYLLIUM	11528-2	S		<1	PPM
COPPER	11528-2	S		760	PPM
NICKEL	11528-2	S		150	PPM
THALLIUM	11528-2	S		75	PPM
ZINC	11528-2	S		1,400	PPM
PHENOLICS, AS PHENOL	11528-2	S		660	PPM
ASH	11528-2	S		240,000	PPM
HEAT OF COMBUSTION	11528-2	S		9,100	BTU/LB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SOIL 3'					
PHENOL	11130-2	S		<500	PPM
2-CHLOROPHENOL	11130-2	S		<500	PPM
2-NITROPHENOL	11130-2	S		<500	PPM
2,4-DIMETHYLPHENOL	11130-2	S		<500	PPM
2,4-DICHLOROPHENOL	11130-2	S		<500	PPM
4-CHLORO-3-METHYL-PHENOL	11130-2	S		<500	PPM
2,4,6-TRICHLOROPHENOL	11130-2	S		<500	PPM
2,4-DINITROPHENOL	11130-2	S		<5,000	PPM
4-NITROPHENOL	11130-2	S		<500	PPM
2-METHYL-4,6-DINITROPHENOL	11130-2	S		<5,000	PPM
PENTACHLOROPHENOL	11130-2	S		<500	PPM
BIS(CHLOROETHYL) ETHER	11130-2	S		<100	PPM
1,2-DICHLOROBENZENE	11130-2	S		<100	PPM
1,4-DICHLOROBENZENE	11130-2	S		<100	PPM
1,3-DICHLOROBENZENE	11130-2	S		<100	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11130-2	S		<100	PPM
N-NITROSODIPROPYL AMINE	11130-2	S		<100	PPM
HEXACHLOROETHANE	11130-2	S		<100	PPM
NITROBENZENE	11130-2	S		<100	PPM
ISOPHORONE	11130-2	S		<100	PPM
BIS(2-CHLOROETHOXY) METHANE	11130-2	S		<100	PPM
1,2,4-TRICHLOROBENZENE	11130-2	S		<100	PPM
NAPHTHALENE	11130-2	S		12,000	PPM
HEXACHLOROBUTADIENE	11130-2	S		<100	PPM
HEXACHLOROCYCLOPENTADIENE	11130-2	S		<100	PPM
2-CHLORONAPHTHALENE	11130-2	S		<100	PPM
DIMETHYL PHTHALATE	11130-2	S		<100	PPM
2,6-DINITROTOLUENE	11130-2	S		<100	PPM
ACENAPHTHYLENE	11130-2	S		920	PPM
ACENAPHTHENE	11130-2	S		<100	PPM
2,4-DINITROTOLUENE	11130-2	S		<100	PPM
DIETHYL PHTHALATE	11130-2	S		<100	PPM
N-NITROSODIMETHYL AMINE	11130-2	S		<100	PPM
4-CHLOROPHENYLPHENYL ETHER	11130-2	S		<100	PPM
FLUORENE	11130-2	S		1,900	PPM
AZOBENZENE	11130-2	S		<100	PPM
N-NITROSODIPHENYL AMINE	11130-2	S		<100	PPM
4-BROMOPHENYLPHENYL ETHER	11130-2	S		<100	PPM
HEXACHLOROBENZENE	11130-2	S		<100	PPM
PHENANTHRENE	11130-2	S		6,500	PPM
ANTHRACENE	11130-2	S		1,200	PPM
DIBUTYL PHTHALATE	11130-2	S		<100	PPM
FLUORANTHENE	11130-2	S		<100	PPM
BENZIDINE	11130-2	S		<3,000	PPM
PYRENE	11130-2	S		3,200	PPM
BUTYLBENZYL PHTHALATE	11130-2	S		<100	PPM
3,3'-DICHLOROBENZIDINE	11130-2	S		<3,000	PPM
BENZO (A) ANTHRACENE	11130-2	S		1,000	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SOIL 3'					
CHRYSENE	11130-2	S		<100	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11130-2	S		<100	PPM
DIOCTYL PHTHALATE	11130-2	S		<100	PPM
BENZO (K) FLUORANTHENE	11130-2	S		<100	PPM
BENZO (B) FLUORANTHENE	11130-2	S		<100	PPM
BENZO (A) PYRENE	11130-2	S		<2,000	PPM
INDENO (1,2,3-C,D) PYRENE	11130-2	S		<2,000	PPM
BENZO (GHI) PERYLENE	11130-2	S		<2,000	PPM
CHLOROMETHANE	11130-2	S		<10	PPM
BROMOMETHANE	11130-2	S		<10	PPM
VINYL CHLORIDE	11130-2	S		<10	PPM
CHLOROETHANE	11130-2	S		<10	PPM
METHYLENE CHLORIDE	11130-2	S		<10	PPM
1,1-DICHLOROETHENE	11130-2	S		<10	PPM
1,1-DICHLOROETHANE	11130-2	S		<10	PPM
TRANS-1,2-DICHLOROETHENE	11130-2	S		<10	PPM
CHLOROFORM	11130-2	S		<10	PPM
1,2-DICHLOROETHANE	11130-2	S		<10	PPM
1,1,1-TRICHLOROETHANE	11130-2	S		<10	PPM
CARBON TETRACHLORIDE	11130-2	S		<10	PPM
BROMODICHLOROMETHANE	11130-2	S		<10	PPM
1,2-DICHLOROPROPANE	11130-2	S		<10	PPM
TRANS-1,3-DICHLOROPROPENE	11130-2	S		<10	PPM
TRICHLOROETHENE	11130-2	S		<10	PPM
BENZENE	11130-2	S		200	PPM
DIBROMOCHLOROMETHANE	11130-2	S		<10	PPM
1,1,2-TRICHLOROETHANE	11130-2	S		<10	PPM
CIS-1,3-DICHLOROPROPENE	11130-2	S		<10	PPM
2-CHLOROETHYL VINYL ETHER	11130-2	S		<10	PPM
BROMOFORM	11130-2	S		<10	PPM
1,1,2,2-TETRACHLOROETHANE	11130-2	S		<10	PPM
TETRACHLOROETHENE	11130-2	S		<10	PPM
TOLUENE	11130-2	S		170	PPM
CHLOROBENZENE	11130-2	S		<10	PPM
ETHYL BENZENE	11130-2	S		200	PPM
DICHLORODIFLUOROMETHANE	11130-2	S		<100	PPM
TRICHLOROFLUOROMETHANE	11130-2	S		<10	PPM
ALDRIN	11130-2	S		<1	PPM
ALPHA BHC	11130-2	S		<1	PPM
BETA BHC	11130-2	S		<5	PPM
GAMMA BHC	11130-2	S		<5	PPM
DELTA BHC	11130-2	S		<5	PPM
CHLORDANE	11130-2	S		<10	PPM
DIELDRIN	11130-2	S		<5	PPM
P,P'DDE	11130-2	S		<5	PPM
P,P'-DDT	11130-2	S		<5	PPM
P,P'DDD	11130-2	S		<5	PPM
ENDOSULFAN I	11130-2	S		<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SOIL 3'					
ENDOSULFAN II	11130-2	S		<10	PPM
ENDOSULFAN SULFATE	11130-2	S		<10	PPM
ENDRIN	11130-2	S		<5	PPM
ENDRIN ALDEHYDE	11130-2	S		<10	PPM
HEPTACHLOR	11130-2	S		<1	PPM
HEPTACHLOR EPOXIDE	11130-2	S		<5	PPM
TOXAPHENE	11130-2	S		<10	PPM
PCB'S, AROCLOR 1254	11130-2	S		<5	PPM
ARSENIC	11130-2	S		730	PPM
BARIUM	11130-2	S		12	PPM
CADMIUM	11130-2	S		5.4	PPM
CHROMIUM	11130-2	S		19	PPM
LEAD	11130-2	S		380	PPM
MERCURY	11130-2	S		<0.2	PPM
SELENIUM	11130-2	S		0.24	PPM
SILVER	11130-2	S		<5	PPM
CYANIDE	11130-2	S		4.6	PPM
CHLOROMETHANE	11130-2	S	D	<10	PPM
BROMOMETHANE	11130-2	S	D	<10	PPM
VINYL CHLORIDE	11130-2	S	D	<10	PPM
CHLOROETHANE	11130-2	S	D	<10	PPM
METHYLENE CHLORIDE	11130-2	S	D	<10	PPM
1,1-DICHLOROETHENE	11130-2	S	D	<10	PPM
1,1-DICHLOROETHANE	11130-2	S	D	<10	PPM
TRANS-1,2-DICHLOROETHENE	11130-2	S	D	<10	PPM
CHLOROFORM	11130-2	S	D	<10	PPM
1,2-DICHLOROETHANE	11130-2	S	D	<10	PPM
1,1,1-TRICHLOROETHANE	11130-2	S	D	<10	PPM
CARBON TETRACHLORIDE	11130-2	S	D	<10	PPM
BROMODICHLOROMETHANE	11130-2	S	D	<10	PPM
1,2-DICHLOROPROPANE	11130-2	S	D	<10	PPM
TRANS-1,3-DICHLOROPROPENE	11130-2	S	D	<10	PPM
TRICHLOROETHENE	11130-2	S	D	<10	PPM
BENZENE	11130-2	S	D	300	PPM
DIBROMOCHLOROMETHANE	11130-2	S	D	<10	PPM
1,1,2-TRICHLOROETHANE	11130-2	S	D	<10	PPM
CIS-1,3-DICHLOROPROPENE	11130-2	S	D	<10	PPM
2-CHLOROETHYL VINYL ETHER	11130-2	S	D	<10	PPM
BROMOFORM	11130-2	S	D	<10	PPM
1,1,2,2-TETRACHLOROETHANE	11130-2	S	D	<10	PPM
TETRACHLOROETHENE	11130-2	S	D	<10	PPM
TOLUENE	11130-2	S	D	99	PPM
CHLOROBENZENE	11130-2	S	D	<10	PPM
ETHYL BENZENE	11130-2	S	D	160	PPM
DICHLORODIFLUOROMETHANE	11130-2	S	D	<100	PPM
TRICHLOROFLUOROMETHANE	11130-2	S	D	<10	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SUBSURFACE WATER 3'					
PHENOL	11130-1	A		21	PPM
2-CHLOROPHENOL	11130-1	A		<0.05	PPM
2-NITROPHENOL	11130-1	A		<0.05	PPM
2,4-DIMETHYLPHENOL	11130-1	A		19	PPM
2,4-DICHLOROPHENOL	11130-1	A		<0.05	PPM
4-CHLORO-3-METHYL-PHENOL	11130-1	A		<0.05	PPM
2,4,6-TRICHLOROPHENOL	11130-1	A		<0.05	PPM
2,4-DINITROPHENOL	11130-1	A		<0.5	PPM
4-NITROPHENOL	11130-1	A		<0.05	PPM
2-METHYL-4,6-DINITROPHENOL	11130-1	A		<0.5	PPM
PENTACHLOROPHENOL	11130-1	A		<0.05	PPM
BIS(CHLOROETHYL) ETHER	11130-1	A		<0.005	PPM
1,2-DICHLOROBENZENE	11130-1	A		<0.005	PPM
1,4-DICHLOROBENZENE	11130-1	A		<0.005	PPM
1,3-DICHLOROBENZENE	11130-1	A		<0.005	PPM
BIS(2-CHLOROISOPROPYL) ETHER	11130-1	A		<0.005	PPM
N-NITROSODIPROPYL AMINE	11130-1	A		<0.005	PPM
HEXACHLOROETHANE	11130-1	A		<0.005	PPM
NITROBENZENE	11130-1	A		<0.005	PPM
ISOPHORONE	11130-1	A		<0.005	PPM
BIS(2-CHLOROETHOXY) METHANE	11130-1	A		<0.005	PPM
1,2,4-TRICHLOROBENZENE	11130-1	A		<0.005	PPM
NAPHTHALENE	11130-1	A		21	PPM
HEXACHLOROBUTADIENE	11130-1	A		<0.005	PPM
HEXACHLOROCYCLOPENTADIENE	11130-1	A		<0.005	PPM
2-CHLORONAPHTHALENE	11130-1	A		<0.005	PPM
DIMETHYL PHTHALATE	11130-1	A		<0.005	PPM
2,6-DINITROTOLUENE	11130-1	A		<0.005	PPM
ACENAPHTHYLENE	11130-1	A		<0.005	PPM
ACENAPHTHENE	11130-1	A		<0.005	PPM
2,4-DINITROTOLUENE	11130-1	A		<0.005	PPM
DIETHYL PHTHALATE	11130-1	A		<0.005	PPM
N-NITROSODIMETHYL AMINE	11130-1	A		<0.005	PPM
4-CHLOROPHENYLPHENYL ETHER	11130-1	A		<0.005	PPM
FLUORENE	11130-1	A		0.19	PPM
AZOBENZENE	11130-1	A		<0.005	PPM
N-NITROSODIPHENYL AMINE	11130-1	A		<0.005	PPM
4-BROMOPHENYLPHENYL ETHER	11130-1	A		<0.005	PPM
HEXACHLOROBENZENE	11130-1	A		<0.005	PPM
PHENANTHRENE	11130-1	A		0.37	PPM
ANTHRACENE	11130-1	A		<0.005	PPM
DIBUTYL PHTHALATE	11130-1	A		<0.005	PPM
FLUORANTHENE	11130-1	A		<0.005	PPM
BENZIDINE	11130-1	A		<0.15	PPM
PYRENE	11130-1	A		<0.005	PPM
BUTYLBENZYL PHTHALATE	11130-1	A		<0.005	PPM
3,3'-DICHLOROBENZIDINE	11130-1	A		<0.15	PPM
BENZO (A) ANTHRACENE	11130-1	A		<0.005	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SUBSURFACE WATER 3'					
CHRYSENE	11130-1	A		<0.005	PPM
BIS (2-ETHYLHEXYL) PHTHLATE	11130-1	A		<0.005	PPM
DIOCTYL PHTHALATE	11130-1	A		<0.005	PPM
BENZO (K) FLUORANTHENE	11130-1	A		<0.005	PPM
BENZO (B) FLUORANTHENE	11130-1	A		<0.005	PPM
BENZO (A) PYRENE	11130-1	A		<0.1	PPM
INDENO (1,2,3-C,D) PYRENE	11130-1	A		<0.1	PPM
BENZO (GHI) PERYLENE	11130-1	A		<0.1	PPM
CHLOROMETHANE	11130-1	A		<0.1	PPM
BROMOMETHANE	11130-1	A		<0.1	PPM
VINYL CHLORIDE	11130-1	A		<0.1	PPM
CHLOROETHANE	11130-1	A		<0.1	PPM
METHYLENE CHLORIDE	11130-1	A		<0.1	PPM
1,1-DICHLOROETHENE	11130-1	A		<0.1	PPM
1,1-DICHLOROETHANE	11130-1	A		<0.1	PPM
TRANS-1,2-DICHLOROETHENE	11130-1	A		<0.1	PPM
CHLOROFORM	11130-1	A		<0.1	PPM
1,2-DICHLOROETHANE	11130-1	A		<0.1	PPM
1,1,1-TRICHLOROETHANE	11130-1	A		<0.1	PPM
CARBON TETRACHLORIDE	11130-1	A		<0.1	PPM
BROMODICHLOROMETHANE	11130-1	A		<0.1	PPM
1,2-DICHLOROPROPANE	11130-1	A		<0.1	PPM
TRANS-1,3-DICHLOROPROPENE	11130-1	A		<0.1	PPM
TRICHLOROETHENE	11130-1	A		<0.1	PPM
BENZENE	11130-1	A		7.2	PPM
DIBROMOCHLOROMETHANE	11130-1	A		<0.1	PPM
1,1,2-TRICHLOROETHANE	11130-1	A		<0.1	PPM
CIS-1,3-DICHLOROPROPENE	11130-1	A		<0.1	PPM
2-CHLOROETHYL VINYL ETHER	11130-1	A		<0.1	PPM
BROMOFORM	11130-1	A		<0.1	PPM
1,1,2,2-TETRACHLOROETHANE	11130-1	A		<0.1	PPM
TETRACHLOROETHENE	11130-1	A		<0.1	PPM
TOLUENE	11130-1	A		1.1	PPM
CHLOROBENZENE	11130-1	A		<0.1	PPM
ETHYL BENZENE	11130-1	A		2.3	PPM
DICHLORODIFLUOROMETHANE	11130-1	A		<1	PPM
TRICHLOROFLUOROMETHANE	11130-1	A		<0.1	PPM
ALDRIN	11130-1	A		<0.001	PPM
ALPHA BHC	11130-1	A		<0.001	PPM
BETA BHC	11130-1	A		<0.005	PPM
GAMMA BHC	11130-1	A		<0.005	PPM
DELTA BHC	11130-1	A		<0.01	PPM
CHLORDANE	11130-1	A		<0.005	PPM
DIELDRIN	11130-1	A		<0.005	PPM
P,P'DDE	11130-1	A		<0.005	PPM
P,P'-DDT	11130-1	A		<0.005	PPM
P,P'DDD	11130-1	A		<0.005	PPM
ENDOSULFAN I	11130-1	A		<0.01	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SUBSURFACE WATER 3'					
ENDOSULFAN II	11130-1	A		<0.01	PPM
ENDOSULFAN SULFATE	11130-1	A		<0.01	PPM
ENDRIN	11130-1	A		<0.005	PPM
ENDRIN ALDEHYDE	11130-1	A		<0.01	PPM
HEPTACHLOR	11130-1	A		<0.001	PPM
HEPTACHLOR EPOXIDE	11130-1	A		<0.005	PPM
TOXAPHENE	11130-1	A		<0.01	PPM
PCB'S, AROCLOR 1254	11130-1	A		<0.005	PPM
ARSENIC	11130-1	A		0.068	PPM
BARIUM	11130-1	A		<0.1	PPM
CADMIUM	11130-1	A		<0.1	PPM
CHROMIUM	11130-1	A		<0.1	PPM
LEAD	11130-1	A		<1	PPM
MERCURY	11130-1	A		<0.002	PPM
SELENIUM	11130-1	A		<0.01	PPM
SILVER	11130-1	A		<0.5	PPM
CYANIDE	11130-1	A		<0.5	PPM
CHLOROMETHANE	11130-1	A	D	<0.1	PPM
BROMOMETHANE	11130-1	A	D	<0.1	PPM
VINYL CHLORIDE	11130-1	A	D	<0.1	PPM
CHLOROETHANE	11130-1	A	D	<0.1	PPM
METHYLENE CHLORIDE	11130-1	A	D	<0.1	PPM
1,1-DICHLOROETHENE	11130-1	A	D	<0.1	PPM
1,1-DICHLOROETHANE	11130-1	A	D	<0.1	PPM
TRANS-1,2-DICHLOROETHENE	11130-1	A	D	<0.1	PPM
CHLOROFORM	11130-1	A	D	<0.1	PPM
1,2-DICHLOROETHANE	11130-1	A	D	<0.1	PPM
1,1,1-TRICHLOROETHANE	11130-1	A	D	<0.1	PPM
CARBON TETRACHLORIDE	11130-1	A	D	<0.1	PPM
BROMODICHLOROMETHANE	11130-1	A	D	<0.1	PPM
1,2-DICHLOROPROPANE	11130-1	A	D	<0.1	PPM
TRANS-1,3-DICHLOROPROPENE	11130-1	A	D	<0.1	PPM
TRICHLOROETHENE	11130-1	A	D	<0.1	PPM
BENZENE	11130-1	A	D	7.0	PPM
DIBROMOCHLOROMETHANE	11130-1	A	D	<0.1	PPM
1,1,2-TRICHLOROETHANE	11130-1	A	D	<0.1	PPM
CIS-1,3-DICHLOROPROPENE	11130-1	A	D	<0.1	PPM
2-CHLOROETHYL VINYL ETHER	11130-1	A	D	<0.1	PPM
BROMOFORM	11130-1	A	D	<0.1	PPM
1,1,2,2-TETRACHLOROETHANE	11130-1	A	D	<0.1	PPM
TETRACHLOROETHENE	11130-1	A	D	<0.1	PPM
TOLUENE	11130-1	A	D	1.0	PPM
CHLOROBENZENE	11130-1	A	D	<0.1	PPM
ETHYL BENZENE	11130-1	A	D	2.1	PPM
DICHLORODIFLUOROMETHANE	11130-1	A	D	<1	PPM
TRICHLOROFLUOROMETHANE	11130-1	A	D	<0.1	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR INFLUENT					
PHENOL	11210	A		<15	PPB
2-CHLOROPHENOL	11210	A		<15	PPB
2-NITROPHENOL	11210	A		<15	PPB
2,4-DIMETHYLPHENOL	11210	A		9,000	PPB
2,4-DICHLOROPHENOL	11210	A		<15	PPB
4-CHLORO-3-METHYL-PHENOL	11210	A		<15	PPB
2,4,6-TRICHLOROPHENOL	11210	A		<15	PPB
2,4-DINITROPHENOL	11210	A		<150	PPB
4-NITROPHENOL	11210	A		<15	PPB
2-METHYL-4,6-DINITROPHENOL	11210	A		<150	PPB
PENTACHLOROPHENOL	11210	A		<15	PPB
BIS(CHLOROETHYL) ETHER	11210	A		<3	PPB
1,2-DICHLOROBENZENE	11210	A		<3	PPB
1,4-DICHLOROBENZENE	11210	A		<3	PPB
1,3-DICHLOROBENZENE	11210	A		<3	PPB
BIS(2-CHLOROISOPROPYL) ETHER	11210	A		<3	PPB
N-NITROSODIPROPYL AMINE	11210	A		<3	PPB
HEXACHLOROETHANE	11210	A		<3	PPB
NITROBENZENE	11210	A		<3	PPB
ISOPHORONE	11210	A		<3	PPB
BIS(2-CHLOROETHOXY) METHANE	11210	A		<3	PPB
1,2,4-TRICHLOROBENZENE	11210	A		<3	PPB
NAPHTHALENE	11210	A		11,000	PPB
HEXACHLOROBUTADIENE	11210	A		<3	PPB
HEXACHLOROCYCLOPENTADIENE	11210	A		<3	PPB
2-CHLORONAPHTHALENE	11210	A		<3	PPB
DIMETHYL PHTHALATE	11210	A		<3	PPB
2,6-DINITROTOLUENE	11210	A		<3	PPB
ACENAPHTHYLENE	11210	A		<3	PPB
ACENAPHTHENE	11210	A		330	PPB
2,4-DINITROTOLUENE	11210	A		<3	PPB
DIETHYL PHTHALATE	11210	A		<3	PPB
N-NITROSODIMETHYL AMINE	11210	A		<3	PPB
4-CHLOROPHENYLPHENYL ETHER	11210	A		<3	PPB
FLUORENE	11210	A		1,100	PPB
AZOBENZENE	11210	A		<3	PPB
N-NITROSODIPHENYL AMINE	11210	A		<3	PPB
4-BROMOPHENYLPHENYL ETHER	11210	A		<3	PPB
HEXACHLOROBENZENE	11210	A		<3	PPB
PHENANTHRENE	11210	A		920	PPB
ANTHRACENE	11210	A		<3	PPB
DIBUTYL PHTHALATE	11210	A		<3	PPB
FLUORANTHENE	11210	A		<3	PPB
BENZIDINE	11210	A		<90	PPB
PYRENE	11210	A		150	PPB
BUTYLBENZYL PHTHALATE	11210	A		<3	PPB
3,3'-DICHLOROBENZIDINE	11210	A		<90	PPB
BENZO (A) ANTHRACENE	11210	A		<3	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR INFLUENT					
CHRYSENE	11210	A		<3	PPB
BIS (2-ETHYLHEXYL) PHTHLATE	11210	A		<3	PPB
DIOCTYL PHTHALATE	11210	A		120	PPB
BENZO (K) FLUORANTHENE	11210	A		<3	PPB
BENZO (B) FLUORANTHENE	11210	A		<3	PPB
BENZO (A) PYRENE	11210	A		<3	PPB
INDENO (1,2,3-C,D) PYRENE	11210	A		<60	PPB
DIBENZO (A,H) ANTHRACENE	11210	A		<60	PPB
BENZO (GHI) PERYLENE	11210	A		<60	PPB
CHLOROMETHANE	11210	A		<10	PPB
BROMOMETHANE	11210	A		<10	PPB
VINYL CHLORIDE	11210	A		<10	PPB
CHLOROETHANE	11210	A		<10	PPB
METHYLENE CHLORIDE	11210	A		<10	PPB
1,1-DICHLOROETHENE	11210	A		<10	PPB
1,1-DICHLOROETHANE	11210	A		<10	PPB
TRANS-1,2-DICHLOROETHENE	11210	A		14	PPB
CHLOROFORM	11210	A		<10	PPB
1,2-DICHLOROETHANE	11210	A		<10	PPB
1,1,1-TRICHLOROETHANE	11210	A		<10	PPB
CARBON TETRACHLORIDE	11210	A		<10	PPB
BROMODICHLOROMETHANE	11210	A		<10	PPB
1,2-DICHLOROPROPANE	11210	A		<10	PPB
TRANS-1,3-DICHLOROPROPENE	11210	A		<10	PPB
TRICHLOROETHENE	11210	A		<10	PPB
BENZENE	11210	A		1,000	PPB
DIBROMOCHLOROMETHANE	11210	A		<10	PPB
1,1,2-TRICHLOROETHANE	11210	A		<10	PPB
CIS-1,3-DICHLOROPROPENE	11210	A		<10	PPB
2-CHLOROETHYL VINYL ETHER	11210	A		<10	PPB
BROMOFORM	11210	A		<10	PPB
1,1,2,2-TETRACHLOROETHANE	11210	A		<10	PPB
TETRACHLOROETHENE	11210	A		<10	PPB
TOLUENE	11210	A		910	PPB
CHLOROBENZENE	11210	A		<10	PPB
ETHYL BENZENE	11210	A		250	PPB
DICHLORODIFLUOROMETHANE	11210	A		<100	PPB
TRICHLOROFLUOROMETHANE	11210	A		<10	PPB
ALDRIN	11210	A		<1	PPB
ALPHA BHC	11210	A		<1	PPB
BETA BHC	11210	A		<5	PPB
GAMMA BHC	11210	A		<5	PPB
DELTA BHC	11210	A		<5	PPB
CHLORDANE	11210	A		<10	PPB
DIELDRIN	11210	A		<5	PPB
P,P'DDE	11210	A		<5	PPB
P,P'-DDT	11210	A		<5	PPB
P,P'DDD	11210	A		<5	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR INFLUENT					
ENDOSULFAN I	11210	A		<10	PPB
ENDOSULFAN II	11210	A		<10	PPB
ENDOSULFAN SULFATE	11210	A		<10	PPB
ENDRIN	11210	A		<5	PPB
ENDRIN ALDEHYDE	11210	A		<10	PPB
HEPTACHLOR	11210	A		<1	PPB
HEPTACHLOR EPOXIDE	11210	A		<5	PPB
TOXAPHENE	11210	A		<10	PPB
PCB'S, AROCLOR 1254	11210	A		<5	PPB
ARSENIC	11210	A		<0.05	PPM
CADMIUM	11210	A		<0.01	PPM
CHROMIUM	11210	A		<0.05	PPM
LEAD	11210	A		<0.05	PPM
MERCURY	11210	A		<0.002	PPM
SELENIUM	11210	A		<0.01	PPM
SILVER	11210	A		<0.05	PPM
CYANIDE	11210	A		<0.1	PPM
ANTIMONY	11210	A		<0.05	PPM
BERYLLIUM	11210	A		<0.01	PPM
COPPER	11210	A		<0.05	PPM
NICKEL	11210	A		<0.05	PPM
THALLIUM	11210	A		<0.1	PPM
ZINC	11210	A		<0.01	PPM
PHENOLICS, AS PHENOL	11210	A		17	PPM
SULFATE	11210	A		7.4	PPM
SULFIDE	11210	A		7.0	PPM
TOTAL ORGANIC CARBON	11210	A		160	PPM
PETROLEUM HYDROCARBONS	11210	A		<1	PPM
CHLOROMETHANE	11210	A	D	<10	PPB
BROMOMETHANE	11210	A	D	<10	PPB
VINYL CHLORIDE	11210	A	D	<10	PPB
CHLOROETHANE	11210	A	D	<10	PPB
METHYLENE CHLORIDE	11210	A	D	<10	PPB
1,1-DICHLOROETHENE	11210	A	D	<10	PPB
1,1-DICHLOROETHANE	11210	A	D	<10	PPB
TRANS-1,2-DICHLOROETHENE	11210	A	D	13	PPB
CHLOROFORM	11210	A	D	<10	PPB
1,2-DICHLOROETHANE	11210	A	D	<10	PPB
1,1,1-TRICHLOROETHANE	11210	A	D	<10	PPB
CARBON TETRACHLORIDE	11210	A	D	<10	PPB
BROMODICHLOROMETHANE	11210	A	D	<10	PPB
1,2-DICHLOROPROPANE	11210	A	D	<10	PPB
TRANS-1,3-DICHLOROPROPENE	11210	A	D	<10	PPB
TRICHLOROETHENE	11210	A	D	<10	PPB
BENZENE	11210	A	D	1,200	PPB
DIBROMOCHLOROMETHANE	11210	A	D	<10	PPB
1,1,2-TRICHLOROETHANE	11210	A	D	<10	PPB
CIS-1,3-DICHLOROPROPENE	11210	A	D	<10	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR INFLUENT					
2-CHLOROETHYL VINYL ETHER	11210	A	D	<10	PPB
BROMOFORM	11210	A	D	<10	PPB
1,1,2,2-TETRACHLOROETHANE	11210	A	D	<10	PPB
TETRACHLOROETHENE	11210	A	D	<10	PPB
TOLUENE	11210	A	D	1,100	PPB
CHLOROBENZENE	11210	A	D	<10	PPB
ETHYL BENZENE	11210	A	D	310	PPB
DICHLORODIFLUOROMETHANE	11210	A	D	<100	PPB
TRICHLOROFLUOROMETHANE	11210	A	D	<10	PPB
PHENOLICS, AS PHENOL	11210	A	D	16	PPM
TOTAL ORGANIC CARBON	11210	A	D	180	PPM

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR EFFLUENT					
PHENOL	11250	A		<15	PPB
2-CHLOROPHENOL	11250	A		<15	PPB
2-NITROPHENOL	11250	A		<15	PPB
2,4-DIMETHYLPHENOL	11250	A		<15	PPB
2,4-DICHLOROPHENOL	11250	A		<15	PPB
4-CHLORO-3-METHYL-PHENOL	11250	A		<15	PPB
2,4,6-TRICHLOROPHENOL	11250	A		<15	PPB
2,4-DINITROPHENOL	11250	A		<150	PPB
4-NITROPHENOL	11250	A		<15	PPB
2-METHYL-4,6-DINITROPHENOL	11250	A		<150	PPB
PENTACHLOROPHENOL	11250	A		<15	PPB
BIS(CHLOROETHYL) ETHER	11250	A		<3	PPB
1,2-DICHLOROBENZENE	11250	A		<3	PPB
1,4-DICHLOROBENZENE	11250	A		<3	PPB
1,3-DICHLOROBENZENE	11250	A		<3	PPB
BIS(2-CHLOROISOPROPYL) ETHER	11250	A		<3	PPB
N-NITROSODIPROPYL AMINE	11250	A		<3	PPB
HEXACHLOROETHANE	11250	A		<3	PPB
NITROBENZENE	11250	A		<3	PPB
ISOPHORONE	11250	A		<3	PPB
BIS(2-CHLOROETHOXY) METHANE	11250	A		<3	PPB
1,2,4-TRICHLOROBENZENE	11250	A		<3	PPB
NAPHTHALENE	11250	A		<3	PPB
HEXACHLOROBUTADIENE	11250	A		<3	PPB
HEXACHLOROCYCLOPENTADIENE	11250	A		<3	PPB
2-CHLORONAPHTHALENE	11250	A		<3	PPB
DIMETHYL PHTHALATE	11250	A		<3	PPB
2,6-DINITROTOLUENE	11250	A		<3	PPB
ACENAPHTHYLENE	11250	A		<3	PPB
ACENAPHTHENE	11250	A		<3	PPB
2,4-DINITROTOLUENE	11250	A		<3	PPB
DIETHYL PHTHALATE	11250	A		<3	PPB
N-NITROSODIMETHYL AMINE	11250	A		<3	PPB
4-CHLOROPHENYLPHENYL ETHER	11250	A		<3	PPB
FLUORENE	11250	A		<3	PPB
AZOBENZENE	11250	A		<3	PPB
N-NITROSODIPHENYL AMINE	11250	A		<3	PPB
4-BROMOPHENYLPHENYL ETHER	11250	A		<3	PPB
HEXACHLOROBENZENE	11250	A		<3	PPB
PHENANTHRENE	11250	A		<3	PPB
ANTHRACENE	11250	A		<3	PPB
DIBUTYL PHTHALATE	11250	A		<3	PPB
FLUORANTHENE	11250	A		<3	PPB
BENZIDINE	11250	A		<90	PPB
PYRENE	11250	A		<3	PPB
BUTYLBENZYL PHTHALATE	11250	A		<3	PPB
3,3'-DICHLOROBENZIDINE	11250	A		<90	PPB
BENZO (A) ANTHRACENE	11250	A		<3	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR EFFLUENT					
CHRYSENE	11250	A		<3	PPB
BIS (2-ETHYLHEXYL) PHTHLATE	11250	A		<3	PPB
DIOCTYL PHTHALATE	11250	A		<3	PPB
BENZO (K) FLUORANTHENE	11250	A		<3	PPB
BENZO (B) FLUORANTHENE	11250	A		<3	PPB
BENZO (A) PYRENE	11250	A		<3	PPB
INDENO (1,2,3-C,D) PYRENE	11250	A		<60	PPB
DIBENZO (A,H) ANTHRACENE	11250	A		<60	PPB
BENZO (GHI) PERYLENE	11250	A		<60	PPB
CHLOROMETHANE	11250	A		<1	PPB
BROMOMETHANE	11250	A		<1	PPB
VINYL CHLORIDE	11250	A		<1	PPB
CHLOROETHANE	11250	A		<1	PPB
METHYLENE CHLORIDE	11250	A		20	PPB
1,1-DICHLOROETHENE	11250	A		<1	PPB
1,1-DICHLOROETHANE	11250	A		<1	PPB
TRANS-1,2-DICHLOROETHENE	11250	A		<1	PPB
CHLOROFORM	11250	A		6.1	PPB
1,2-DICHLOROETHANE	11250	A		<1	PPB
1,1,1-TRICHLOROETHANE	11250	A		<1	PPB
CARBON TETRACHLORIDE	11250	A		<1	PPB
BROMODICHLOROMETHANE	11250	A		<1	PPB
1,2-DICHLOROPROPANE	11250	A		<1	PPB
TRANS-1,3-DICHLOROPROPENE	11250	A		<1	PPB
TRICHLOROETHENE	11250	A		3.9	PPB
BENZENE	11250	A		<1	PPB
DIBROMOCHLOROMETHANE	11250	A		<1	PPB
1,1,2-TRICHLOROETHANE	11250	A		<1	PPB
CIS-1,3-DICHLOROPROPENE	11250	A		<1	PPB
2-CHLOROETHYL VINYL ETHER	11250	A		<1	PPB
BROMOFORM	11250	A		<1	PPB
1,1,2,2-TETRACHLOROETHANE	11250	A		<1	PPB
TETRACHLOROETHENE	11250	A		3	PPB
TOLUENE	11250	A		19	PPB
CHLOROBENZENE	11250	A		<1	PPB
ETHYL BENZENE	11250	A		<1	PPB
DICHLORODIFLUOROMETHANE	11250	A		<10	PPB
TRICHLOROFLUOROMETHANE	11250	A		<1	PPB
ALDRIN	11250	A		<1	PPB
ALPHA BHC	11250	A		<1	PPB
BETA BHC	11250	A		<5	PPB
GAMMA BHC	11250	A		<5	PPB
DELTA BHC	11250	A		<5	PPB
CHLORDANE	11250	A		<10	PPB
DIELDRIN	11250	A		<10	PPB
P,P'DDE	11250	A		<5	PPB
P,P'-DDT	11250	A		<5	PPB
P,P'DDD	11250	A		<5	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR EFFLUENT					
ENDOSULFAN I	11250	A		<10	PPB
ENDOSULFAN II	11250	A		<10	PPB
ENDOSULFAN SULFATE	11250	A		<10	PPB
ENDRIN	11250	A		<5	PPB
ENDRIN ALDEHYDE	11250	A		<10	PPB
HEPTACHLOR	11250	A		<1	PPB
HEPTACHLOR EPOXIDE	11250	A		<5	PPB
TOXAPHENE	11250	A		<10	PPB
PCB'S, AROCLOR 1254	11250	A		<5	PPB
ARSENIC	11250	A		<0.05	PPM
BARIUM	11250	A		12	PPB
CADMIUM	11250	A		<0.01	PPM
CHROMIUM	11250	A		<0.05	PPM
LEAD	11250	A		<0.05	PPM
MERCURY	11250	A		<0.002	PPM
SELENIUM	11250	A		<0.01	PPM
SILVER	11250	A		<0.05	PPM
CYANIDE	11250	A		<0.1	PPM
ANTIMONY	11250	A		<0.05	PPM
BERYLLIUM	11250	A		<0.01	PPM
COPPER	11250	A		1.6	PPM
NICKEL	11250	A		<0.05	PPM
THALLIUM	11250	A		<0.1	PPM
ZINC	11250	A		0.75	PPM
PHENOLICS, AS PHENOL	11250	A		0.59	PPM
TOTAL ORGANIC CARBON	11250	A		24	PPM
OIL & GREASE	11250	A		9	PPM
CHEMICAL OXYGEN DEMAND	11250	A		71	PPM
TOTAL SUSPENDED SOLIDS	11250	A		13	PPM
PHENOL	11250	A	D	<15	PPB
2-CHLOROPHENOL	11250	A	D	<15	PPB
2-NITROPHENOL	11250	A	D	<15	PPB
2,4-DIMETHYLPHENOL	11250	A	D	<15	PPB
2,4-DICHLOROPHENOL	11250	A	D	<15	PPB
4-CHLORO-3-METHYL-PHENOL	11250	A	D	<15	PPB
2,4,6-TRICHLOROPHENOL	11250	A	D	<15	PPB
2,4-DINITROPHENOL	11250	A	D	<150	PPB
4-NITROPHENOL	11250	A	D	<15	PPB
2-METHYL-4,6-DINITROPHENOL	11250	A	D	<150	PPB
PENTACHLOROPHENOL	11250	A	D	<15	PPB
BIS(CHLOROETHYL) ETHER	11250	A	D	<3	PPB
1,2-DICHLOROBENZENE	11250	A	D	<3	PPB
1,4-DICHLOROBENZENE	11250	A	D	<3	PPB
1,3-DICHLOROBENZENE	11250	A	D	<3	PPB
BIS(2-CHLOROISOPROPYL) ETHER	11250	A	D	<3	PPB
N-NITROSODIPROPYL AMINE	11250	A	D	<3	PPB
HEXACHLOROETHANE	11250	A	D	<3	PPB
NITROBENZENE	11250	A	D	<3	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR EFFLUENT					
ISOPHORONE	11250	A	D	<3	PPB
BIS(2-CHLOROETHOXY) METHANE	11250	A	D	<3	PPB
1,2,4-TRICHLOROBENZENE	11250	A	D	<3	PPB
NAPHTHALENE	11250	A	D	<3	PPB
HEXACHLOROBUTADIENE	11250	A	D	<3	PPB
HEXACHLOROCYCLOPENTADIENE	11250	A	D	<3	PPB
2-CHLORONAPHTHALENE	11250	A	D	<3	PPB
DIMETHYL PHTHALATE	11250	A	D	<3	PPB
2,6-DINITROTOLUENE	11250	A	D	<3	PPB
ACENAPHTHYLENE	11250	A	D	<3	PPB
ACENAPHTHENE	11250	A	D	<3	PPB
2,4-DINITROTOLUENE	11250	A	D	<3	PPB
DIETHYL PHTHALATE	11250	A	D	<3	PPB
N-NITROSODIMETHYL AMINE	11250	A	D	<3	PPB
4-CHLOROPHENYLPHENYL ETHER	11250	A	D	<3	PPB
FLUORENE	11250	A	D	<3	PPB
AZOBENZENE	11250	A	D	<3	PPB
N-NITROSODIPHENYL AMINE	11250	A	D	<3	PPB
4-BROMOPHENYLPHENYL ETHER	11250	A	D	<3	PPB
HEXACHLOROBENZENE	11250	A	D	<3	PPB
PHENANTHRENE	11250	A	D	<3	PPB
ANTHRACENE	11250	A	D	<3	PPB
DIBUTYL PHTHALATE	11250	A	D	<3	PPB
FLUORANTHENE	11250	A	D	<3	PPB
BENZIDINE	11250	A	D	<90	PPB
PYRENE	11250	A	D	<3	PPB
BUTYLBENZYL PHTHALATE	11250	A	D	<3	PPB
3,3'-DICHLOROBENZIDINE	11250	A	D	<90	PPB
BENZO (A) ANTHRACENE	11250	A	D	<3	PPB
CHRYSENE	11250	A	D	<3	PPB
BIS (2-ETHYLHEXYL) PHTHLATE	11250	A	D	<3	PPB
DIOCTYL PHTHALATE	11250	A	D	<3	PPB
BENZO (K) FLUORANTHENE	11250	A	D	<3	PPB
BENZO (B) FLUORANTHENE	11250	A	D	<3	PPB
BENZO (A) PYRENE	11250	A	D	<3	PPB
INDENO (1,2,3-C,D) PYRENE	11250	A	D	<60	PPB
DIBENZO (A,H) ANTHRACENE	11250	A	D	<60	PPB
BENZO (GHI) PERYLENE	11250	A	D	<60	PPB
CHLOROMETHANE	11250	A	D	<1	PPB
BROMOMETHANE	11250	A	D	<1	PPB
VINYL CHLORIDE	11250	A	D	<1	PPB
CHLOROETHANE	11250	A	D	<1	PPB
METHYLENE CHLORIDE	11250	A	D	19	PPB
1,1-DICHLOROETHENE	11250	A	D	<1	PPB
1,1-DICHLOROETHANE	11250	A	D	<1	PPB
TRANS-1,2-DICHLOROETHENE	11250	A	D	<1	PPB
CHLOROFORM	11250	A	D	5.7	PPB
1,2-DICHLOROETHANE	11250	A	D	<1	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR EFFLUENT					
1,1,1-TRICHLOROETHANE	11250	A	D	<1	PPB
CARBON TETRACHLORIDE	11250	A	D	<1	PPB
BROMODICHLOROMETHANE	11250	A	D	<1	PPB
1,2-DICHLOROPROPANE	11250	A	D	<1	PPB
TRANS-1,3-DICHLOROPROPENE	11250	A	D	<1	PPB
TRICHLOROETHENE	11250	A	D	3.9	PPB
BENZENE	11250	A	D	<1	PPB
DIBROMOCHLOROMETHANE	11250	A	D	<1	PPB
1,1,2-TRICHLOROETHANE	11250	A	D	<1	PPB
CIS-1,3-DICHLOROPROPENE	11250	A	D	<1	PPB
2-CHLOROETHYL VINYL ETHER	11250	A	D	<1	PPB
BROMOFORM	11250	A	D	<1	PPB
1,1,2,2-TETRACHLOROETHANE	11250	A	D	<1	PPB
TETRACHLOROETHENE	11250	A	D	4	PPB
TOLUENE	11250	A	D	15	PPB
CHLOROBENZENE	11250	A	D	<1	PPB
ETHYL BENZENE	11250	A	D	<1	PPB
DICHLORODIFLUOROMETHANE	11250	A	D	<10	PPB
TRICHLOROFLUOROMETHANE	11250	A	D	<1	PPB
ALDRIN	11250	A	D	<1	PPB
ALPHA BHC	11250	A	D	<1	PPB
BETA BHC	11250	A	D	<5	PPB
GAMMA BHC	11250	A	D	<5	PPB
DELTA BHC	11250	A	D	<5	PPB
CHLORDANE	11250	A	D	<10	PPB
DIELDRIN	11250	A	D	<10	PPB
P,P'DDE	11250	A	D	<5	PPB
P,P'-DDT	11250	A	D	<5	PPB
P,P'DDD	11250	A	D	<5	PPB
ENDOSULFAN I	11250	A	D	<10	PPB
ENDOSULFAN II	11250	A	D	<10	PPB
ENDOSULFAN SULFATE	11250	A	D	<10	PPB
ENDRIN	11250	A	D	<5	PPB
ENDRIN ALDEHYDE	11250	A	D	<10	PPB
HEPTACHLOR	11250	A	D	<1	PPB
HEPTACHLOR EPOXIDE	11250	A	D	<5	PPB
TOXAPHENE	11250	A	D	<10	PPB
PCB'S, AROCLOR 1254	11250	A	D	<5	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR DISCHARGE					
PHENOL	11341	A		<5	PPB
2-CHLOROPHENOL	11341	A		<5	PPB
2-NITROPHENOL	11341	A		<5	PPB
2,4-DIMETHYLPHENOL	11341	A		<5	PPB
2,4-DICHLOROPHENOL	11341	A		<5	PPB
4-CHLORO-3-METHYL-PHENOL	11341	A		<5	PPB
2,4,6-TRICHLOROPHENOL	11341	A		<5	PPB
2,4-DINITROPHENOL	11341	A		<50	PPB
4-NITROPHENOL	11341	A		<5	PPB
2-METHYL-4,6-DINITROPHENOL	11341	A		<50	PPB
PENTACHLOROPHENOL	11341	A		<5	PPB
BIS(CHLOROETHYL) ETHER	11341	A		<1	PPB
1,2-DICHLOROBENZENE	11341	A		<1	PPB
1,4-DICHLOROBENZENE	11341	A		<1	PPB
1,3-DICHLOROBENZENE	11341	A		<1	PPB
BIS(2-CHLOROISOPROPYL) ETHER	11341	A		<1	PPB
N-NITROSODIPROPYL AMINE	11341	A		<1	PPB
HEXACHLOROETHANE	11341	A		<1	PPB
NITROBENZENE	11341	A		<1	PPB
ISOPHORONE	11341	A		<1	PPB
BIS(2-CHLOROETHOXY) METHANE	11341	A		<1	PPB
1,2,4-TRICHLOROBENZENE	11341	A		<1	PPB
NAPHTHALENE	11341	A		<1	PPB
HEXACHLOROBUTADIENE	11341	A		<1	PPB
HEXACHLOROCYCLOPENTADIENE	11341	A		<1	PPB
2-CHLORONAPHTHALENE	11341	A		<1	PPB
DIMETHYL PHTHALATE	11341	A		<1	PPB
2,6-DINITROTOLUENE	11341	A		<1	PPB
ACENAPHTHYLENE	11341	A		<1	PPB
ACENAPHTHENE	11341	A		<1	PPB
2,4-DINITROTOLUENE	11341	A		<1	PPB
DIETHYL PHTHALATE	11341	A		<1	PPB
N-NITROSODIMETHYL AMINE	11341	A		<1	PPB
4-CHLOROPHENYLPHENYL ETHER	11341	A		<1	PPB
FLUORENE	11341	A		<1	PPB
AZOBENZENE	11341	A		<1	PPB
N-NITROSODIPHENYL AMINE	11341	A		<1	PPB
4-BROMOPHENYLPHENYL ETHER	11341	A		<1	PPB
HEXACHLOROBENZENE	11341	A		<1	PPB
PHENANTHRENE	11341	A		<1	PPB
ANTHRACENE	11341	A		<1	PPB
DIBUTYL PHTHALATE	11341	A		<1	PPB
FLUORANTHENE	11341	A		<1	PPB
BENZIDINE	11341	A		<30	PPB
PYRENE	11341	A		<1	PPB
BUTYLBENZYL PHTHALATE	11341	A		<1	PPB
3,3'-DICHLOROBENZIDINE	11341	A		<30	PPB
BENZO (A) ANTHRACENE	11341	A		<1	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR DISCHARGE					
CHRYSENE	11341	A		<1	PPB
BIS (2-ETHYLHEXYL) PHTHLATE	11341	A		<1	PPB
DIOCTYL PHTHALATE	11341	A		<1	PPB
BENZO (K) FLUORANTHENE	11341	A		<1	PPB
BENZO (B) FLUORANTHENE	11341	A		<1	PPB
BENZO (A) PYRENE	11341	A		<1	PPB
INDENO (1,2,3-C,D) PYRENE	11341	A		<20	PPB
DIBENZO (A,H) ANTHRACENE	11341	A		<20	PPB
BENZO (GHI) PERYLENE	11341	A		<20	PPB
CHLOROMETHANE	11341	A		<1	PPB
BROMOMETHANE	11341	A		<1	PPB
VINYL CHLORIDE	11341	A		<1	PPB
CHLOROETHANE	11341	A		<1	PPB
METHYLENE CHLORIDE	11341	A		5.3	PPB
1,1-DICHLOROETHENE	11341	A		<1	PPB
1,1-DICHLOROETHANE	11341	A		<1	PPB
TRANS-1,2-DICHLOROETHENE	11341	A		<1	PPB
CHLOROFORM	11341	A		<1	PPB
1,2-DICHLOROETHANE	11341	A		<1	PPB
1,1,1-TRICHLOROETHANE	11341	A		<1	PPB
CARBON TETRACHLORIDE	11341	A		<1	PPB
BROMODICHLOROMETHANE	11341	A		<1	PPB
1,2-DICHLOROPROPANE	11341	A		<1	PPB
TRANS-1,3-DICHLOROPROPENE	11341	A		<1	PPB
TRICHLOROETHENE	11341	A		<1	PPB
BENZENE	11341	A		<1	PPB
DIBROMOCHLOROMETHANE	11341	A		<1	PPB
1,1,2-TRICHLOROETHANE	11341	A		<1	PPB
CIS-1,3-DICHLOROPROPENE	11341	A		<1	PPB
2-CHLOROETHYL VINYL ETHER	11341	A		<1	PPB
BROMOFORM	11341	A		<1	PPB
1,1,2,2-TETRACHLOROETHANE	11341	A		<1	PPB
TETRACHLOROETHENE	11341	A		<1	PPB
TOLUENE	11341	A		<1	PPB
CHLOROBENZENE	11341	A		<1	PPB
ETHYL BENZENE	11341	A		<1	PPB
DICHLORODIFLUOROMETHANE	11341	A		<10	PPB
TRICHLOROFLUOROMETHANE	11341	A		<1	PPB
ALDRIN	11341	A		<1	PPB
ALPHA BHC	11341	A		<1	PPB
BETA BHC	11341	A		<5	PPB
GAMMA BHC	11341	A		<5	PPB
DELTA BHC	11341	A		<5	PPB
CHLORDANE	11341	A		<10	PPB
DIELDRIN	11341	A		<5	PPB
P,P'-DDE	11341	A		<5	PPB
P,P'-DDT	11341	A		<5	PPB
P,P'DDD	11341	A		<5	PPB

QUANTA RESOURCES
PRIORITY POLLUTANT LAB ANALYSIS

PARAMETER	ID #	MATRIX	SAMPLE TYPE	CONCENTRATION	UNITS
* SEPARATOR DISCHARGE					
ENDOSULFAN I	11341	A		<10	PPB
ENDOSULFAN II	11341	A		<10	PPB
ENDOSULFAN SULFATE	11341	A		<10	PPB
ENDRIN	11341	A		<5	PPB
ENDRIN ALDEHYDE	11341	A		<10	PPB
HEPTACHLOR	11341	A		<5	PPB
HEPTACHLOR EPOXIDE	11341	A		<5	PPB
TOXAPHENE	11341	A		<10	PPB
PCB'S, AROCLOR 1254	11341	A		<5	PPB
ARSENIC	11341	A		<0.05	PPM
CADMIUM	11341	A		<0.01	PPM
CHROMIUM	11341	A		<0.05	PPM
LEAD	11341	A		<0.05	PPM
MERCURY	11341	A		<0.002	PPM
SELENIUM	11341	A		<0.01	PPM
SILVER	11341	A		<0.05	PPM
CYANIDE	11341	A		<0.1	PPM
ANTIMONY	11341	A		<0.05	PPM
BERYLLIUM	11341	A		<0.01	PPM
COPPER	11341	A		<0.05	PPM
NICKEL	11341	A		<0.05	PPM
THALLIUM	11341	A		<0.2	PPM
ZINC	11341	A		0.23	PPM
PHENOLICS, AS PHENOL	11341	A		<0.1	PPM
OIL & GREASE	11341	A		3	PPM

Physical Characteristics of Waste Oil

Tank		Flashpoint (°F)	BS & W	API Gravity
A-6	skim	220	trace	-
	0-1 ft	-	30%	-
	1-2 ft	-	60%	-
A-2	skim	200	trace	-
	0-1 ft	-	52%	-
	1-2 ft	-	56%	-
A-6		190	trace	29.0 @ 84°F
B9		270°F	trace	28.2 @ 72°F
B10		168°F	trace	29.2 @ 72°F
B11		168°F	trace	29.4 @ 73°F
B12		210°F	trace	29.4 @ 73°F
C1		174°F	trace	30.4 @ 84°F
C2		250°F	trace	30.0 @ 84°F
C3		250°F	trace	30.8 @ 98°F
C4		182°F	trace	30.6 @ 84°F
C5		210°F	trace	31.6 @ 106°F
C6		238°F	trace	29.2 @ 70°F
C7		196°F	trace	28.6 @ 66°F
C8		225°F	trace	27.2 @ 68°F
C9		194°F	trace	28.8 @ 69°F
C10		250°F	trace	23.4 @ 69°F
C11		218°F	trace	28.6 @ 69°F
D1		210°F	trace	26.6 @ 67°F
D2		180°F	trace	34.0 @ 67°F
D3		270°F	trace	22.0 @ 69°F
D4		insufficient sample, burns from match flame	trace	7.0 @ 73°F
D5		380°F	trace	23.2 @ 73°F
D8		300°F	trace	23.4 -
D9		190°F	1.5	21.0 @ 80°F
D10		360°F	trace	29.0 @ 80°F
D11		-	60%	-- -
D14		-	30%	15.6 @ 73°F
D26		230°F	-	19.4 @ 70°F
D27		220°F	-	24.4 @ 76°F

COMPARISON OF TANK PROFILING METHODOLOGIES

TANK	METHOD	INTERFACE HEIGHT IN FEET AND INCHES: AIR/LIQUID	OIL/WATER	WATER/SLUDGE
A-1	Infrared	24' Ø"	23'	22'
	Sonic	24' Ø"	22' 1Ø"	-
A-2	Infrared	Could not use.	No clear water layer.	
	Sonic	7' 5"	6' 5"	6"
A-3	Infrared	18' 1Ø"	None	2' 8"
	Condensation	15' Ø"	None	None
A-4	Infrared	14' 3"	None	3' 1Ø"
	Sonic	14' 3"	None	3' 6"
	Condensation	14' Ø"	None	None
A-6	Plumb Bob	5' 6"	None	4' 3"
	Sonic	Could not use.	No water layer.	-
	Infrared	Could not use.	No water layer.	-
A-7	Infrared	22' 11"	20'	6' 6"
	Sonic	22' 11"	19' 9"	None
B-1 - B-6		Only one method per tank.		
B-7	Infrared	2' 3"	None	1' 3"
	Sonic	2' 3"	None	1' 3"
B-9	Infrared	6' 5"	5' 6"	1' 9"
	Sonic	6' 6"	5' 8"	1' 11"
B-10	Infrared	9' 4"	None	7"
	Sonic	9' 4"	None	6"
B-11	Infrared	8' 4"	None	9"
	Sonic	8' 4"	None	6"
C-1	Infrared	41' 11"	5' 9"	3' 8"
	Sonic	41' 11"	5' 3"	3' 2"
C-2	Infrared	Could not use.	No clear water layer.	
	Sonic	11' 4"	None	2' 1Ø"
C-3	Infrared	Could not use.	No clear water layer.	
	Sonic	2' 11"	None	1' 11"

COMPARISON OF TANK PROFILING METHODOLOGIES

TANK	METHOD	INTERFACE HEIGHT IN FEET AND INCHES AIR/LIQUID	OIL/WATER	WATER/SLUDGE
C-4	Infrared	Could not use.	No clear water layer.	
	Sonic	40' 7"	4' 2"	8"
C-5	Infrared	Could not use.	No clear water layer.	
	Sonic	3' 1"	None	11"
C-6	Infrared	Could not use.	No clear water layer.	
	Sonic	1' 10"	None	10"
C-7	Infrared	Could not use.	No clear water layer.	
	Sonic	25' 9"	9' 0"	4"
C-8	Infrared	-	-	1' 11"
	Sonic	-	-	1' 11"
C-9	Infrared	11' 5"	6' 1"	3"
C-10	Infrared	8' 3"	6' 10"	2"
	Sonic	8' 3"	6' 0"	3"
C-11	Infrared	22' 8"	21' 2"	6"
	Sonic	22' 8"	21' 2"	0"
D-1	Infrared	6' 3" Water	None	0"
	Sonic	6' 0" Oil	None	0"
D-3	Infrared	9' 6"	9' 0"	3' 3"
	Sonic	9' 6"	9' 1"	3' 2"
D-4	Infrared	9' 11"	None	8' 9"
	Sonic	9' 11"	None	8' 9"
D-5	Infrared	2' 5"	2' 5"	None
	Sonic	2' 5"	2' 1"	None
D-7	Infrared	Could not use.	Oil too thick.	
	Sonic	19' 3"	18' 5"	10'
D-8	Infrared	Could not use.	Oil too thick.	-
	Sonic	19' 6"	None	10'
	Plumb Bob	19' 6"	None	14' 6"
	Condensation	18' 6"	None	10"

COMPARISON OF TANK PROFILING METHODOLOGIES

TANK	METHOD	INTERFACE HEIGHT IN FEET AND INCHES		
		AIR/LIQUID	OIL/WATER	WATER/SLUDGE
D-9	Infrared	9' 9"	None	4"
	Sonic	9' 9"	2' 4"	4"
D-10	Infrared	28' 8"	27' 4"	9' 3"
	Sonic	28' 8"	27' 4"	7' 5"
D-11	Infrared	37' 7"	32' 1"	1Ø' 1"
	Sonic	34' 7"	32' 5"	Not Done
D-14	Infrared	Could not use.	Oil too thick.	-
	Sonic	1Ø'	9' 4"	6' 3"
D-15	Infrared	1Ø' 3"	None	1' 1Ø"
	Sonic	1Ø' 3"	None	1' 1Ø"
D-29	Infrared	1' 8"	None	5"
	Sonic	1' 8"	None	4"
D-30	Infrared	3' 3"	None	5"
	Sonic	3' 3"	None	3"

AIR MONITORING DATA*

Date	Location	Measurement	Value
4/3/85	Site Ambient	HNU	<1
4/5/85	Ambient-D Farm	HNU	<1
	Abandoned railcar	HNU	<1
	T.T.	HNU	15
4/8/85	S-1	HNU	<1
		D-Toluene	ND
		D-Benzene	2ppm
	T.T. (D-10)	HNU	1
		D-Toluene	ND
		D-Benzene	ND
4/9/85	T.T. (D-10)	HNU	20
	T.T. Vent	D-HCN	Trace?
		D-Benzene	5ppm
		D-Toluene	25-40ppm
		D-HCL	ND
4/12/85	T.T. Vent	D-Toluene	300ppm
	T.T.-5'	D-Toluene	ND
	Leak (D-13)	D-Toluene	ND
	Hatch (D-13)	D-Toluene	ND
	S-2	D-Toluene	ND
	Utility Pole Hole	D-Toluene	ND
4/15/85	T.T. Vent (A-2)	D-Toluene	Trace
	T.T. Vent (A-2)	D-Toluene	70ppm
	T.T. (A-2)	D-Toluene	Trace
4/16/85	T.T. (D-13)	OVA	BG
	T.T. (D-13)	OVA	BG
	T.T. Hatch (A-4)	OVA	300-400
	T.T. 1' from Hatch (A-4)	OVA	Trace
	T.T. hatch (A-4)	OVA	70
	S-1, S-2	D-Toluene	ND
4/17/85	T.T. (A-7)	D-Toluene	ND
	T.T. (A-7)	D-HCN	ND
	T.T. (A-7)	OVA	BG
	T.T. 1' from Hatch (A-7)	OVA	5
	T.T. Hatch (A-7)	OVA	300
	T.T. Vent (D-10)	OVA	2
	T.T. (D-10)	OVA	BG

* For abbreviations, see 'Key', page 4.

AIR MONITORING DATA

Date	Location	Measurement	Value
4/18/85	T.T. (D-13)	OVA	BG
	T.T. 1' from Vent (D-13)	OVA	2-20
4/22/85	T.T (D-14)	HNU	BG
	T.T. Vent (D-14)	HNU	20
	Drip Can (A-7)	HNU	BG
	Drip Can, 1' from top (A-7)	HNU	5-10
	Drip Can (A-6)	HNU	BG
	Drip Can (A-6)	D-Toluene	ND
	Drip Can (A-6)	D-HCN	ND
4/23/85	Drip Can (A-6)	HNU	BG
	T.T. (A-7)	HNU	BG
	T.T. (A-6)	HNU	BG
4/25/85	In Separator	HNU	BG
	T.T. (B-5)	HNU	BG
	T.T. Vent (B-5)	HNU	5-20
	T.T. Drip can (B-5)	HNU	3
5/1/85	Separator		
	Influent line-liquid	HNU	10-15
	" solids	HNU	3-5
	" working area	HNU	BG
5/6/85	McTighe leak	HNU	BG
5/8/85	Separator hydrolaser cleaning	HNU	BG
	Cleaning B-1, B-2	HNU	BG
	Cleaning B-4	HNU	>20
5/9/85	Below D-26 Hatch	HNU	40
	D-26 Hatch	HNU	10
	1' above D-26 Hatch	HNU	5
	Below D-27 Hatch	HNU	60
	D-27 Hatch	HNU	15-20
	1' above D-27 Hatch	HNU	5-10
	D farm ambient	HNU	BG

AIR MONITORING DATA

Date	Location	Measurement	Value
5/15/85	D Farm ambient	HNU	BG
	D-8 Pumping	HNU	BG
	T.T. Vent (D-8)	HNU	20-50
	Separator	HNU	BG
5/20/85	T.T. (D-8)	HNU	BG
	T.T. (C-8)	HNU	BG
5/21/85	T.T. Vent (D-8)	HNU	50
	T.T. 5-10' from vent (D-8)	HNU	5-10
	T.T. (D-8)	HNU	BG
	Top A-4	HNU	1-2
5/22/85	T.T. Vent (D-8)	HNU	50
	T.T. 5'10' from vent (D-8)	HNU	5-10
	T.T. 5-10' from vent (D-11)	HNU	5-10
	Tank D-8	HNU	BG
	Cleaning C-8, inside hatch	HNU/%LEL	20/BG
5/23/85	T.T. (D-11)	HNU	BG
	T.T. (D-8)	HNU	BG
	T.T. (A-7)	HNU	BG
	T.T. Hatch opening (not pumping)	HNU	40-50
	C-11 hatch	HNU	40
	C-10 hatch	HNU	10
	C-8 1' inside hatch	HNU	7
	C-8 side hatch	HNU	5
5/24/85	T.T. (D-11)	HNU	BG H_2S odor
5/29/85	C-8, inside hatch	HNU	8
6/4/85	T.T. Vent	HNU	3-4
	T.T. 5' from vent	HNU	BG

AIR MONITORING DATA

Date	Location	Measurement	Value
6/6/85	C-8, inside hatch	HNU	4-5
	T.T. (D-14)	HNU	BG
	T.T. Vent (D-8)	HNU	200-300
	T.T. Vent (D-8)	D-Toluene	300
	T.T. 3' from vent (D-8)	HNU	50-100
	T.T. 5' from vent (D-8)	HNU	25-50
	T.T. 8' from vent (D-8)	HNU	5-10
6/10/85	Inside B-1	HNU	BG
	Inside B-1	%LEL/O_2	0/21
	Inside B-2	HNU	3
	Inside B-2	%LEL/O_2	0/21
	Inside C-8	HNU	9
	Inside C-8	%LEL/O_2	2/21
6/11/85	A-2 aqueous (Spill)	HNU	BG
		D-Toluene	ND
6/12/85	Inside C-10	HNU	5
6/19/85	T.T. Vent (B-1)	HNU	10-20
	T.T. Vent (B-2)	HNU	10-20
	T.T. Vent (B-2)	D-Toluene	10ppm
8/13/85	C-10 Hatch (D-10)	HNU	10-20
	C-10 1' above hatch	HNU	BG
	C-11 Hatch (D-10)	HNU	5-10
	C-11 1' above hatch	HNU	BG

*Key

T.T. = Tank truck
D. = Draeger tube
ND = Non detectable
BG = Background
( ) = Tank waste

APPENDIX C

MANIFEST AND REMOVAL SUMMARY

06/25/86

QUANTA RESOURCES

MANIFEST INVENTORY

DATE	MANIFEST	TANK	TRANSPORTER CODE	TSD CODE	WASTE NUMBER	QUANTITY (GAL)
04/05/85	PAB00768390	D-10	WC	WC	D008	5500
04/05/85	PAB00768401	D-10	WC	WC	D008	5580
04/08/85	PAB00768434	CUTOFF	WC	WC	D008	5580
04/08/85	PAB00768460	CUTOFF	WC	WC	D008	5000
04/08/85	PAB00768445	CUTOFF	WC	WC	D008	5000
04/09/85	PAB00769274	D-10	WC	WC	D008	5475
04/09/85	PAB00769263	D-10	WC	WC	D008	4850
04/09/85	PAB01715620	D-10	CV	WC	D008	4510
04/09/85	PAB01775616	D-10	CV	WC	D008	4500
04/10/85	PAB00599723	D-10	SJ	WC	D008	4938
04/10/85	PAB01775734	D-10	CV	WC	D008	4700
04/10/85	PAB00769370	D-10	WC	WC	D008	5133
04/10/85	PAB00769366	D-10	WC	WC	D008	4547
04/10/85	PAB00768644	D-10	WC	WC	D008	4930
04/10/85	PAB01775653	D-10	CV	WC	D008	4510
04/10/85	PAB00769333	D-10	WC	WC	D008	5000
04/10/85	PAB00768666	D-10	CI	WC	D008	5500
04/10/85	PAB00768456	D-10	WC	WC	D008	5290
04/11/85	PAB01775712	D-10	CV	WC	D008	4584
04/11/85	PAB01775723	D-10	CV	WC	D008	4584
04/11/85	PAB00768246	D-10	WC	WC	D008	5314
04/11/85	PAB01775771	D-10	CV	WC	D008	4590
04/11/85	PAB00768272	D-10	WC	WC	D008	5290
04/11/85	PAB00768235	D-10	WC	WC	D008	5000
04/11/85	PAB01594331	D-10	CI	WC	D008	5500
04/11/85	PAB00768261	D-10	WC	WC	D008	4928
04/11/85	PAB00768250	D-10	WC	WC	D008	4954
04/12/85	PAB01775745	D-13	CV	WC	D008	4584
04/12/85	PAB00769344	D-10	WC	WC	D008	5475
04/12/85	PAB00769241	D-13	WC	WC	D008	5254
04/12/85	PAB01775760	D-10	CV	WC	D008	4584
04/12/85	PAB01775756	D-10	CV	WC	D008	4584
04/12/85	PAB00769355	D-13	WC	WC	D008	5000
04/15/85	PAB01775782	D-10	CV	WC	D008	4584
04/15/85	PAB01636714	D-10	WC	WC	D008	5254
04/15/85	PAB01775863	D-13	CV	WC	X728	4657
04/15/85	PAB01636703	A-2	WC	WC	X728	5580
04/15/85	PAB00769252	D-13	WC	WC	X728	5502
04/16/85	PAB01636821	D-13	WC	WC	X728	5254
04/16/85	PAB01775852	D-10,A-4	CV	WC	D008	4584
04/16/85	PAB01636806	D-10	WC	WC	D008	4946

QUANTA RESOURCES
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MANIFEST INVENTORY

DATE	MANIFEST	TANK	TRANSPORTER CODE	TSD CODE	WASTE NUMBER	QUANTITY (GAL)
04/16/85	PAB01636810	D-13	WC	WC	X728	4800
04/16/85	PAB01636795	D-10	WC	WC	D008	4756
04/16/85	PAB01636725	D-10	WC	WC	D008	5290
04/17/85	PAB01775001	D-10	CV	WC	D008	4510
04/17/85	PAB00630696	A-7	AIMS	WC		4600
04/17/85	PAB01774990	D-10	CV	WC	D008	4510
04/17/85	PAB01638022	D-10	WC	WC	D008	5000
04/17/85	PAB01637005	A-7	WC	WC	D008	5363
04/17/85	PAB01638011	D-10	WC	WC	D008	4615
04/18/85	PAB01775023	D-10	CV	WC	D008	4584
04/18/85	PAB01774986	A-7	CV	WC	D008	4510
04/18/85	PAB01775056	A-7	CV	WC	D008	4510
04/18/85	PAB01638066	D-13,D-14	WC	WC	D008	5580
04/18/85	PAB01638055	D-14	WC	WC	X728	5545
04/18/85	PAB01638044	D-14	WC	WC	D008	5000
04/19/85	PAB01775093	D-14	CV	WC	D008	4584
04/19/85	PAB01637753	A-7	WC	WC	D008	5300
04/19/85	PAB01637764	D-10	WC	WC	D008	5200
04/19/85	PAB01775060	A-7	CV	WC	D008	4510
04/19/85	PAB01775104	D-10	CV	WC	D008	4510
04/19/85	PAB01637775	D-14	WC	WC	D008	4876
04/22/85	NJA0034429	A-1	LION	LION	X721	2410
04/22/85	NJA0034430	A-1	LION	LION	X721	2050
04/22/85	PAB01594891	D-14	CI	WC	D008	4641
04/22/85	PAB00619404	A-7	ARSI	WC	D008	5400
04/22/85	PAB01637860	D-14	WC	WC	D008	5254
04/22/85	PAB00619393	A-7	ARSI	WC	D008	5000
04/22/85	PAB01775115	A-7	CV	WC	D008	4510
04/22/85	PAB01775130	D-14	CV	WC	D008	4510
04/22/85	PAB01637871	D-14	WC	WC	D008	5475
04/22/85	PAB00630685	D-14	WC	WC	D008	5200
04/23/85	NJA0034434	A-2	LION	LION	X721	2450
04/23/85	PAB00619415	A-7	ARSI	WC	D008	5000
04/23/85	PAB01637845	A-7	WC	WC	D008	5215
04/23/85	PAB00906603	A-6,D-10	AIMS	WC		4600
04/23/85	PAB01594913	D-14	CI	WC	D008	5400
04/23/85	PAB00519794	D-14	CV	WC	D008	4510
04/23/85	PAB01637941	A-7	WC	WC	D008	4434
04/23/85	PAB01594902	D-10	CI	WC	D008	5500
04/23/85	PAB01637930	D-14	WC	WC	D008	5475
04/23/85	PAB01637926	A-7	WC	WC	D008	5520

QUANTA RESOURCES

MANIFEST INVENTORY

DATE	MANIFEST	TANK	TRANSPORTER CODE	TSD CODE	WASTE NUMBER	QUANTITY (GAL)
04/23/85	PAB00619426	D-10	ARSI	WC	D008	5000
04/24/85	NJA0034438	A-2	LION	LION	X721	2450
04/24/85	PAB00519816	D-14	CV	WC	D008	4521
04/24/85	PAB00519820	D-14	CV	WC	D008	4521
04/24/85	PAB01816636	A-7	WC	WC	D008	5254
04/24/85	PAB01637856	B-5	WC	WC	D008	5124
04/24/85	PAB00619430	D-14	ARSI	WC	D008	5000
04/24/85	PAB00619441	D-14	ARSI	WC	D008	5000
04/24/85	PAB01638000	D-14	WC	WC	D008	5055
04/24/85	PAB01816625	B-5	WC	WC	D008	4615
04/25/85	PAB00619452	B-5	ARSI	WC	D008	4645
04/25/85	PAB01816614	B-5	WC	WC	D008	4600
04/25/85	PAB01816791	A-7	WC	WC	D008	5254
04/25/85	PAB00519864	A-7	CV	WC	D008	4510
04/25/85	PAB00519842	B-5	CV	WC	D008	4584
04/26/85	PAB00768224	D-14	ARSI	WC	D008	5100
04/26/85	PAB01816802	B-5	WC	WC	D008	4500
04/26/85	PAB01816780	D-10	WC	WC	D008	5465
04/26/85	PAB01816920	A-7	WC	WC	D008	5254
04/26/85	PAB01816942	D-14	WC	WC	D008	5055
04/29/85	PAB00768552	A-1	WC	WC	D008	5290
04/29/85	PAB00619463	C-10	ARSI	WC	D008	4800
04/29/85	PAB01817071	C-11	WC	WC	D008	5167
04/29/85	PAB01817060	D-10	WC	WC	D008	5071
04/30/85	PAB01817082	A-4	WC	WC	D008	5325
04/30/85	PAB01816931	D-11	WC	WC	D008	5071
04/30/85	PAB00619485	C-10	ARSI	WC	D008	5525
04/30/85	PAB00619474	C-11	ARSI	WC	D008	4800
05/03/85	PAB00414864	C-11	WC	WC	D008	4850
05/03/85	PAB01816511	C-11	ARSI	WC	D008	5040
05/03/85	PAB01817863	C-11,C-10	WC	WC	D008	5475
05/03/85	PAB01817874	A-7	WC	WC	D008	5254
05/06/85	PAB01818062	A-7	WC	WC	D008	5254
05/06/85	PAB01816522	A-7	WC	WC	D008	5000
05/06/85	PAB00414886	C-10	WC	WC	D008	4150
05/06/85	PAB00768202	D-8,D-10	WC	WC	D008	5475
05/07/85	PAB01818132	A-7	WC	WC	D008	5400
05/07/85	PAB00414875	D-8	WC	WC	D008	4537
05/07/85	PAB01818121	S-1	WC	WC	D008	5580
05/07/85	PAB01818143	D-11	WC	WC	D008	5300
05/08/85	PAB01818235	A-7	WC	WC	D008	5254

QUANTA RESOURCES

MANIFEST INVENTORY

DATE	MANIFEST	TANK	TRANSPORTER CODE	TSD CODE	WASTE NUMBER	QUANTITY (GAL)
05/08/85	PAB01818213	D-11	WC	WC	D008	5071
05/08/85	PAB01818224	D-11	WC	WC	D008	4819
05/08/85	PAB00414901	D-8	WC	WC	D008	4607
05/15/85	PAB01818935	D-8	WC	WC	D008	5220
05/15/85	PAB01818946	D-8	WC	WC	D008	5390
05/16/85	PAB01819112	B-9	WC	WC	D008	4488
05/16/85	PAB01819101	D-8	WC	WC	D008	5254
05/17/85	PAB01819565	A-7	WC	WC	D008	5254
05/17/85	PAB00630501	D-8	WC	WC		5000
05/20/85	PAB01819646	A-7	WC	WC	D008	5011
05/20/85	PAB01816533	D-8,C-8	ARSI	WC	D008	5000
05/21/85	PAB01819705	D-8,T-1	WC	WC	D008	5580
05/21/85	PAB01816544	D-8	ARSI	WC	D008	5100
05/22/85	PAB01816566	D-8	ARSI	WC	D008	5000
05/22/85	PAB00630453	D-11	WC	WC	D006	5000
05/22/85	PAB01816555	D-8	ARSI	WC	D008	5000
05/22/85	PAB00630556	D-11	WC	WC	D006	5000
05/23/85	PAB01816570	A-7	ARSI	WC	D008	5300
05/23/85	PAB01816592	A-7	ARSI	WC	D008	5000
05/23/85	PAB01819845	D-8	WC	WC	D008	5470
05/23/85	PAB01819764	A-7	WC	WC	D008	4900
05/23/85	PAB01589022	D-11	ARSI	WC	D008	5020
05/23/85	PAB01816581	D-8	ARSI	WC	D008	5300
05/23/85	PAB01819856	D-11	WC	WC	D008	5071
05/24/85	PAB00630464	D-11	WC	WC	D006	5000
05/24/85	PAB00414853	D-8	WC	WC	D008	4900
05/24/85	PAB01589033	A-7	ARSI	WC	D008	5000
05/24/85	PAB01589044	D-11	ARSI	WC	D008	5040
05/28/85	PAB01690566	D-11	WC	WC	D008	4736
05/28/85	PAB00630442	D-11,D-8	WC	WC	D006	5000
05/29/85	PAB01716606	D-11	WC	WC	D008	5254
05/29/85	PAB00630512	A-7	WC	WC	D008	5000
05/29/85	PAB00414735	D-15	WC	WC	D008	4673
05/29/85	PAB01589055	D-8	ARSI	WC	D008	5000
05/29/85	PAB01716702	D-11	WC	WC	D008	5352
05/29/85	PAB01589066	D-8,S-1	ARSI	WC	D008	4987
05/30/85	PAB01717122	D-15	WC	WC	D008	5099
05/30/85	PAB01690592	D-11	WC	WC	D008	4673
05/30/85	PAB01717111	D-15	WC	WC	D008	5000
05/30/85	PAB01717144	A-7	WC	WC	D008	5011
05/30/85	PAB01717155	A-3	WC	WC	D008	4900

QUANTA RESOURCES

MANIFEST INVENTORY

DATE	MANIFEST	TANK	TRANSPORTER CODE	TSD CODE	WASTE NUMBER	QUANTITY (GAL)
05/31/85	PAB01717133	D-15	WC	WC	D008	5099
05/31/85	PAB01690555	A-7	WC	WC	D008	4673
05/31/85	PAB01717214	D-11	WC	WC	D008	4969
05/31/85	PAB01717251	A-3	WC	WC	D008	5088
05/31/85	PAB01717225	D-8,D-10	WC	WC	D008	5124
05/31/85	PAB01717240	D-8	WC	WC	D008	5071
06/03/85	PAB01717376	A-7	WC	WC	D008	5254
06/03/85	PAB01816603	D-8	ARSI	WC	D008	4843
06/03/85	PAB01589070	D-10	ARSI	WC	D008	5000
06/03/85	PAB01717715	D-11	WC	WC	D008	5088
06/03/85	PAB00630523	D-15	AIMS	WC	D008	4767
06/03/85	PAB01691115	D-15	WC	WC	D008	4465
06/04/85	PAB01690544	A-7,D-8	WC	WC	D008	4150
06/04/85	PAB01589081	D-14	ARSI	WC	D008	5000
06/04/85	PAB01589092	C-10,S-1	ARSI	WC	D008	4953
06/04/85	PAB00630022	D-10	AIMS	WC	D008	4767
06/04/85	PAB01717310	D-11	WC	WC	D008	5071
06/04/85	PAB01717365	D-15	WC	WC	D008	4932
06/04/85	NJA0046641	D-8	CTL	DUP	D008	4964
06/04/85	PAB01819650	A-7,C-10	WC	WC	D008	5071
06/05/85	PAB00630044	D-11	AIMS	WC	D008	4850
06/05/85	PAB01717833	A-7	WC	WC	D008	5500
06/05/85	PAB01589103	D-10	ARSI	WC	D008	5041
06/05/85	PAB01589114	D-8	ARSI	WC	X728	3800
06/05/85	PAB01691130	D-14	WC	WC	D008	4945
06/05/85	PAB01717354	D-15	WC	WC	D008	5504
06/06/85	NJA0046639	D-10,D-8	CTL	DUP	D008	4988
06/06/85	NJA0046640	D-10,D-8	CTL	DUP	D008	5053
06/06/85	PAB01589125	D-15	ARSI	WC	D008	4875
06/06/85	PAB01589151	A-4	ARSI	WC	D008	5040
06/06/85	PAB01717881	D-14,D-15,A-4	WC	WC	D008	4946
06/06/85	PAB01691174	C-11,D-11,S-1	WC	WC	D008	4673
06/06/85	PAB01717903	D-8,D-15	WC	WC	X728	5211
06/06/85	PAB01717892	D-14,D-15	WC	WC	X728	4247
06/07/85	NJA0046644	D-10	CTL	DUP	D008	5532
06/07/85	NJA0046645	D-10	CTL	DUP	D008	5025
06/07/85	PAB01718824	A-1	WC	WC	D008	4932
06/07/85	PAB01718835	A-1,D-5	WC	WC	D008	5475
06/10/85	PAB01717870	A-1,C-11	WC	WC	X728	5022
06/10/85	PAB01718710	A-1	WC	WC	D008	4842
06/10/85	PAB01718916	A-4	WC	WC	D008	5325

QUANTA RESOURCES

MANIFEST INVENTORY

DATE	MANIFEST	TANK	TRANSPORTER CODE	TSD CODE	WASTE NUMBER	QUANTITY (GAL)
06/10/85	NJA0030282	D-10	CTL	DUP	D008	5532
06/10/85	NJA0030288	D-10	CTL	DUP	D008	5025
06/11/85	NJA0030271	D-10	CTL	DUP	D008	5064
06/11/85	NJA0030273	D-10	CTL	DUP	D008	5080
06/11/85	PAB01718706	A-1	WC	WC	D008	5320
06/11/85	PAB01718846	A-2	WC	WC	D008	5211
06/12/85	PAB01589162	A-2	ARSI	WC	D008	5000
06/12/85	PAB01718754	A-2	WC	WC	D008	4178
06/12/85	PAB01718765	A-2,B-2	WC	WC	D008	5500
06/12/85	NJA0030286	D-10	CTL	DUP	D008	5664
06/12/85	NJA0030287	D-10	CTL	DUP	D008	5025
06/12/85	PAB01589173	A-2,D-8,D-14	ARSI	WC	X728	5205
06/13/85	PAB01589184	A-1	ARSI	WC	D008	5123
06/13/85	NJA0046647	T-1,D-10	CTL	DUP	D008	5664
06/13/85	NJA0046648	T-1,D-10	CTL	DUP	D008	5112
06/14/85	PAB01589206	A-1,S-1,D-14,D8	ARSI	WC	X728	5281
06/14/85	PAB01589195	A-1	ARSI	WC	D008	5071
06/14/85	NJA0046646	T-1,D-10	CTL	DUP	D008	5664
06/14/85	NJA0046643	T-1,D-10	CTL	DUP	D008	5112
06/17/85	PAB01720353	A-1,S-1,T-1	WC	WC	D008	5290
06/17/85	PAB01720375	S-1,C-8	WC	WC	D008	5000
06/18/85	PAB01720143	A-1	WC	WC	D008	4538
06/18/85	PAB01720272	A-7,D-14	WC	WC	D008	5055
06/19/85	PAB01589210	B-4,C-11,S-1	ARSI	WC	D008	4495
06/20/85	PAB01720132	A-2,B-4, "D"	WC	WC	D008	5290
06/20/85	NJA0030277		NYSWRR	DUP	D008	21342
06/20/85	NJA0030275		NYSWRR	DUP	D008	21739
06/20/85	NJA0030276		NYSWRR	DUP	D008	0
06/21/85	PAB01837813	A-2,C-10,D-11	WC	WC	D008	5055
06/25/85	PAB01838023	C-5,C-11,D-11	WC	WC	X728	5220
06/26/85	PAB01838130	C-5,A-7	WC	WC	X728	5055
06/27/85	NJA0030279		NYSWRR	DUP	D008	22208
06/27/85	NJA0030280		NYSWRR	DUP	D008	21368
06/27/85	NJA0030280	A-7	NYSWRR	DUP	D008	21368
06/27/85	NJA0030278		NYSWRR	DUP	D008	21749
06/27/85	PAB01837905	A-7,C-5,S-1	WC	WC	X728	5011
06/27/85	NJA0030279		NYSWRR	DUP	D008	22208
06/27/85	NJA0030278	A-7	NYSWRR	DUP	D008	21749
07/02/85	PAB01589221	C-11,S-1	ARSI	WC	D008	4511
07/12/85	NJA0030283	C-11,D-10	NYSWRR	DUP	D008	21443
07/25/85	PAB01720364	C-11,D-10	WC	WC	D008	4799

QUANTA RESOURCES

MANIFEST INVENTORY

DATE	MANIFEST	TANK	TRANSPORTER CODE	TSD CODE	WASTE NUMBER	QUANTITY (GAL)
08/05/85	PAB2513862	S-1,D-11	WC	WC	D008	5011
08/08/85	NJA0030281	C-10,C-11(D-10)	NYSWRR	DUP	D008	21000
08/08/85	NJA0030284	C-10,C-11(D-10	NYSWRR	DUP	D008	22254
08/13/85	NJA0030289	C-10,C-11(D-10)	NYSWRR	DUP	D008	21006
08/13/85	NJA0030290	C-10,C-11(D-10)	NYSWRR	DUP	D008	21000
08/13/85	NJA0046650	C-10,C-11(D-10)	NYSWRR	DUP	D008	21000
08/22/85	NJA0030291	C-10,C-11(D-10)	NYSWRR	DUP	D008	21000
08/29/85	NJA0030285	C-10,C-11(D-10)	NYSWRR	DUP	D008	21000
08/29/85	PAB2500002	C-10(D-10),S-1	WC	WC	D008	4678
09/06/85	PAB2486035	D-11	WC	WC	D008	5022
09/13/85	PAB2487284	D-11,S-1	WC	WC	D008	4270
09/23/85	NJA0075289	D-10,D-11	NYSWRR	DUP	D008	21000
09/23/85	NJA0030294	D-10	NYSWRR	DUP	D008	21500
09/23/85	NJA0030293	D-11	NYSWRR	DUP	D008	20800
09/23/85	NJA0046642	D-10,D-11	NYSWRR	DUP	D008	21500
09/24/85	NJA0075290	D-11	NYSWRR	DUP	D008	21500
09/25/85	PAB2488415	D-10,D-11	WC	WC	D008	5200
09/25/85	PAB2500315	D-11,S-1	WC	WC	D006	5000
*** Total ***						
						1649681

APPENDIX D

RCRA DISPOSAL FACILITY COMPLIANCE REVIEWS

Disposal Facility RCRA Complaince Checklist*

I. CERCLA Site Identification Shadyside (Quanta)

Site Location River Rd Edgewater NJ

OSC John Witkowski Phone 201 321 6739 / 201 941 9541

II. RCRA Disposal/Storage Facility Information

Disposal Facility RCRA ID Number: MID 048090633

Owner/Operator: Wayne Disposal

Location: Wayne Michigan

Hazardous Substances to be sent (amounts/types): 500 cubic yards petroleum / coal tar tank bottoms / disposables

III. Facility Status (Indicate Source of Information: EPA Region 5)

- ☐ Interim Status
- ☐ U.S. EPA Permit # MID 048090633
- ☐ State Permit or License # ______
- ☒ Facility authorized to accept all hazardous substances listed above

- ☒ Storage
- ☒ Treatment
- ☒ Disposal
  - ☒ Landfill
  - ☐ Land Treatment
  - ☐ Surface Impoundment
  - ☐ Waste Pile
  - ☐ Incineration
  - ☐ Reclaimation

If no, which hazardous substances are not acceptable ______

Last RCRA compliance inspection by: ☒ State, ☐ Federal Date: 9/85

Compliance Status:	IN	OUT
Financial Assurance	☐	☐
Groundwater monitoring	☐	☐
Other see below	☐	☒

Current enforcement action: ☐ YES ☒ NO
(State of Federal)

Explanation: Security inadequate / dozer operator w/o current drivers safety card / waste analysis acceptance plan inadequate — / compliance letter to be issued —

* This checklist is to be completed by the OSC for each facility used in a cleanup.

IV. Any known controversial issues:

V. Additional information: The Wayne landfill is a double lined celled facility — Handling waste from Detroit area — It has accepted enforcement action in past in previous season — Allied disposes wastes at this landfill along with other larger corporation — they will notify landfill also and request compliance.

Date: 12/12/85

OSC Signature: John Witkowski

Section Chief's Initials: DHZ Date: 1/13/86

Disposal Facility RCRA Complaince Checklist*

I. CERCLA Site Identification Quanta

Site Location Edgewater New Jersey #43

OSC John Witkowski. Phone 321 6739

II. RCRA Disposal/Storage Facility Information

Disposal Facility RCRA ID Number: NJD 084 044 064

Owner/Operator: Fionetti Oil Recovery

Location: Old Bridge NJ 08857

Hazardous Substances to be sent (amounts/types): Waste oils containing lead, other heavy metals etc. compounds 14,000 gallons / PCB less than 50 ppm

III. Facility Status (Indicate Source of Information: SW II EPA Telephone / NJDEP Sheets)

- [ ] Interim Status
- [ ] U.S. EPA Permit # ______
- [ ] State Permit or License # 1209C
- [x] Facility authorized to accept all hazardous substances listed above

- [x] Storage
- [x] Treatment
- [x] Disposal
  - [x] Landfill
  - [ ] Land Treatment
  - [ ] Surface Impoundment
  - [ ] Waste Pile
  - [ ] Incineration
  - [x] Reclaimation

If no, which hazardous substances are not acceptable ______

Last RCRA compliance inspection by: [x] State, [ ] Federal Date: 11/84

Compliance Status:

	IN	OUT
Financial Assurance	[ ] ✓	[ ]
Groundwater monitoring	[ ] ✓	[ ]
Other OK	[ ] ✓	[ ]
Current enforcement action: (State of Federal)	[ ] YES	[x] NO

Explanation: EPA lists as minor - has no inspection other than TAT in 12/84

IV. Any known controversial issues: No

V. Additional information:

Date: 4/3/85

OSC Signature: John Witkowski

Section Chief's Initials: ______ Date: ______

Disposal Facility RCRA Complaince Checklist*

I. CERCLA Site Identification Quanta #43

Site Location Edgewater New Jersey

OSC John Witkowski Phone 321-6739

II. RCRA Disposal/Storage Facility Information

Disposal Facility RCRA ID Number: PAD 085 690 592

Owner/Operator: Waste Conversion

Location: Hatfield Pa 19440

Hazardous Substances to be sent (amounts/types): UN# 9189 - Hazardous waste liquid - contains lead cyanid, [illegible] levels of priority pollutants in aqueous [illegible] oily base Sludge PCB's below 50 ppm 2 million gallons COD/TOC [illegible]

III. Facility Status (Indicate Source of Information: telephone SW III)

- [ ] Interim Status
- [ ] U.S. EPA Permit # ______
- [ ] State Permit or License # PSW 30096
- [x] Facility authorized to accept all hazardous substances listed above

If no, which hazardous substances are not acceptable ______

- [x] Storage
- [x] Treatment
- [x] Disposal
  - [x] Landfill
  - [ ] Land Treatment
  - [ ] Surface Impoundment
  - [ ] Waste Pile
  - [ ] Incineration
  - [x] Reclaimation

Last RCRA compliance inspection by: [x] State, [ ] Federal Date: Monthly March 5, 1985

Compliance Status:	IN	OUT
Financial Assurance	[x]	[ ]
Groundwater monitoring	[x]	[ ]
Other ______	[x]	[ ]
Current enforcement action: (State of Federal)	[ ] YES	[x] NO

Explanation: ______

* This checklist is to be completed by the OSC for each facility used in a cleanup.

IV. Any known controversial issues: local groups against facility - no action more.

V. Additional information:

Date: 4/3/85

OSC Signature: John Witkowski

Section Chief's Initials: ______ Date: ______

Dis[posal] Facility RCRA Complaince C[hec]klist*

I. CERCLA Site Identification Quanta #43

Site Location Edgewater New Jersey

OSC John Witkowski Phone 321-6739

II. RCRA Disposal/Storage Facility Information

Disposal Facility RCRA ID Number: NJD 002385730

Owner/Operator: Du Pont

Location: Deepwater New Jersey

Hazardous Substances to be sent (amounts/types): 2 million gallon waste water contaminated with low levels of priority pollutants including PCB's. also levels of lead, cyanide other heavy metals, oil and grease. COD/TOC Toxic

III. Facility Status (Indicate Source of Information: Telephone SWII Print out

- [ ] Interim Status
- [ ] U.S. EPA Permit # ______
- [ ] State Permit or License # 5109
- [X] Facility authorized to accept all hazardous substances listed above

- [X] Storage
- [X] Treatment
- [X] Disposal
  - [X] Landfill
  - [ ] Land Treatment
  - [ ] Surface Impoundment
  - [ ] Waste Pile
  - [X] Incineration
  - [ ] Reclaimation

If no, which hazardous substances are not acceptable ______

Last RCRA compliance inspection by: [X] State monthly, [X] Federal 9/84 Date: ←

Compliance Status:

	IN	OUT
Financial Assurance	[X]	[ ]
Groundwater monitoring	[X]	[ ]
Other ✓	[X]	[ ]

Current enforcement action: (State of Federal) [X] YES [ ] NO

Explanation: Groundwater monitoring on compliance schedule.

IV. Any known controversial issues: None Federal - State has Groundwater monitor request to increase - Patent is meeting compliance schedule.

V. Additional information:

Date: 4-3-85

OSC Signature: John Witkowski

Section Chief's Initials: ______ Date: ______

Appendix E

APPENDIX E

SELECTED POLREPS

APPENDIX E

SELECTED POLREPS

POLREP #	DATE	MILESTONES
33	4/1/85	Action Memo signed, Notice Letter sent to 62 PRPs.
34	4/5/85	Delivery Order for $200,000 signed. ERCS contractor on site.
41	5/6/85	Removal priorities established by tank, On site computer support.
43	5/16/85	EPA Region II requested additional $517,500 for Immediate Removal Action.
48	6/14/85	PRPs submitted proposed removal work-plan outline.
55	7/29/85	Immediate Removal budget increased to $1,581,500.
63	9/27/85	PRP (Allied Corp.) and landowner agree to provide site security and routine maintenance.
65	10/11/85	Consent Order signed by Allied Corp., effective on establishment of PRP Trust Fund.
66	10/28/85	Unilateral Order issued against non-consenting PRPs.
68	11/13/85	Allied Corp. on site to take over removal of all above ground materials under Consent Order. Landowner was sole non-consenting PRP to respond on site to Unilateral Order.
70	12/5/85	EPA/ERCS Immediate Removal Action officially concluded 11/27/85.

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: April 1, 1985

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
B. Metzger, EPA
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C. (Data Gram)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
M. Sadat, NJDEP
NRC

POLREP NO.:	Thirty-Three (33)
SITE/SPILL NO.:	43/180-82
POLLUTANT:	Waste Oil, PCB's, Heavy Metals, Cyanide, Unknowns
SOURCE:	Quanta Resources Corporation
LOCATION:	Edgewater, New Jersey
AMOUNT:	4,000,000 Gallons
WATER BODY:	Hudson River

1. SITUATION:

A. The physical conditions at the site remain unchanged. No site improvements have been undertaken and no oil or water has been removed since January 1985. SPCC violations continue.

2. ACTION TAKEN:

A. The Action Memorandum has been signed by Headquarters and a Notice Letter sent to 62 potential responsible parties.

B. A site mitigation work plan detailing planned on site actions and waste removal options has been prepared by U.S. EPA.

C. The ERCS contractor has been notified of the impending action. A delivery order and daily work orders have been prepared by EPA to initiate on site actions.

3. <u>FUTURE PLANS AND RECOMMENDATIONS:</u>

A. The ERCS contractor will be mobilized on Wednesday, April 3, 1985, barring an acceptable response from potential responsible parties.

B. EPA and NJDEP will continue to work with the potential responsible parties to clean up the site as appropriate.

CASE PENDS X CASE CLOSED___ SUBMITTED BY: John Witkowski

(TAT)

John Witkowski, OSC
Response and Prevention Branch

Date Released: 4/2/85

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: April 5, 1985

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
B. Metzger, EPA
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C.
(Data Gram)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
M. Sadat, NJDEP
NRC

POLREP NO.:	Thirty-Four (34)
SITE/SPILL NO.:	43/180-82
POLLUTANT:	Waste Oil, PCB's, Heavy Metals, Cyanide, Unknowns
SOURCE:	Quanta Resources Corporation
LOCATION:	Edgewater, New Jersey
AMOUNT:	4,000,000 Gallons
WATER BODY:	Hudson River

1. SITUATION:

A. Potential responsible parties have not responded on site to the EPA's Notice Letter.

B. A delivery order for $ 200,000 was issued by the EPA to the ERCS contractor on April 13, 1985 to begin immediate removal actions.

C. No change in site physical conditions.

2. ACTION TAKEN:

A. April 3, 1985 - Skies were overcast with light drizzle throughout the day. The ERCS contractor mobilized on site, conducted a site assessment, and was issued priority work items by the EPA.

B. April 4, 1985 - Temperatures were mild with sunny skies in morning, becoming overcast in the afternoon. The oil/ water separator was started and operated in a recycle mode. Preparations were made to pump water from tank A-4 through the oil/water separator to the Hudson River. In addition, decontamination and office trailers were brought on site.

3. Financial Status:

A.	Total Extramural Trust Funds Authorized for Mitigation Contracts	$ 4,460,000
B.	Expenditures for Mitigation	
	1. Amount obligated under ERCS Contract #68-01-6893, O.H. Materials, DCN # KCS 453	200,000
	2. Estimated expenditures to 4/4/85, DCN # KCS 453	4,933
	3. Balance of obligated amount to 4/4/85 under DCN # KCS 453	196,067
C.	Estimated TAT costs to 4/4/85	1,600
D.	Estimated EPA costs to 4/4/85	400
E.	Estimated total expenditures Percentage of 4.46M	6,933 0.15%

4. FUTURE PLANS AND RECOMMENDATIONS:

A. Pump water from tank A-4 through the oil/water separator to the Hudson River.

B. Dispose of oil from tank A-2 and water from D-10.

C. Conduct other ERCS actions on site.

D. EPA and NJDEP will continue to work with the potential responsible parties as appropriate.

CASE PENDS X CASE CLOSED ___ SUBMITTED BY: John Witkowski

John Witkowski, OSC
Response and Prevention Branch

(TAT)

Date Released: 4/5/85

8503-23

3308

PRIORITY

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: May 6, 1985

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J .Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COPTNY
ERD, Washington, D.C. (Data Gram)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
M. Sadat, NJDEP
NRC

POLREP NO.: Forty-one (41)
SITE/SPILL NO.: 43/180-82
POLLUTANT: Waste Oil, PCB's, Heavy Metals, Cyanide, Unknowns
SOURCE: Quanta Resources Corporation
LOCATION: Edgewater, New Jersey
AMOUNT: 4,000,000 Gallons
WATER BODY: Hudson River

1. SITUATION:

A. ERCS actions continue on site.

B. Weather has continued to be variable, from unseasonably warm and dry with gusty winds to heavy rains.

C. Physical conditions on site continue to worsen: deteriorating tanks, valves and pipes continue to leak, varying from day to day.

2. ACTION TAKEN:

A. Site mobilization continued.

B. Tank priorities for contents removal are being established using the following criteria. Additional tanks have been added as conditions changed and inspections

TANK NUMBER

CRITERIA	A1	A2	A3	A4	A6	A7	B5	C10	C11	D8	D10	D11	D13	D14
Tank volume exceeds yard containment	X		X	X	X	X				X	X	X		
Chemical hazards					X	X	X	X	X	X	X	X	X	X
Fire/explosion hazard		X			X	X								
Deteriorated tank			X	X	X	X	X			X		X	X	X
Special hazard due to spill path	X	X	X		X	X					X	X	X	X
Potential overtopping of containment	X	X			X	X				X	X	X		X
Tank overtopping potential				X		X					X			X
Deteriorated roof			X	X		X				X	X	X	X	X
Operational safety	X	X	X	X		X	X			X	X	X	X	X
Bulk storage transfer use						X		X	X					

C. Liquids have been removed from additional tanks; C-10, C-11, D-8, and D-11. Removal rationale from these tanks is as follows:

<u>Tank-C-10:</u> Estimated volume 26,000 gallons -- 23,100 gallons water phase and 2,900 gallons oily phase. Previous analysis of the water phase revealed an elevated cyanide level. The emptied tank is needed as a bulk storage/mixing tank for transfering liquids to railroad tank cars for removal and disposal.

<u>Tank C-11:</u> Estimated volume 22,500 gallons -- 21,000 gallons water phase and 1,500 gallons oily phase. Previous analysis revealed elevated cyanide in the water phase. The emptied tank is needed as a bulk storage/mixing tank for transferring liquids to railroad tank cars for removal and disposal.

<u>Tank D-8:</u> Estimated volume 499,000 gallons -- 243,000 gallons oily phase and 256,000 water/sludge phase. Present volume exceeds yard capacity. Tank is deter iorated as is roof, allowing rainwater to enter tank. This tank was originally thought to contain only 50,000 gallons of water and oil.

<u>Tank D-11:</u> Estimated volume 585,000 gallons -- 288,000 gallons water phase, 184,000 gallons oily phase and 113,000 gallons sludge. Tank volume exceeds yard capacity. Previous content analysis indicated elevated levels of cyanide and lead in water phase. Tank is deteriorated and leaks from side sampling valves. Roof is partially missing.

D. Water removal (gallons) from the site is as follows:

Tank	Total 4/26 - 5/3	Destination	Total Thru 5/3
yard water	30,000	Hudson River	230,000
A-1	5,290	Waste Conversion	5,290
A-4	6,000	Hudson River	76,764
A-7	5,254	Waste Conversion	70,624
B-5	4,500	" "	28,060
C-10	1,475	" "	1,475
C-11	13,904	" "	13,904
D-10	15,861	" "	237,803
D-13	------	" "	25,000
D-14	10,155	" "	94,785
TOTAL	92,439		790,967

E. Oil removal (gallons) from the site is as follows:

Tank	Total 4/26 - 5/3	Destination	Total Thru 5/3
A-1	-0-	Lionetti	4,460
A-2	-0-	" "	10,480
A-6	-0-	Waste Conversion	1,125
D-13	-0-	" "	14,641
D-14	-0-	" "	993
TOTAL			31,699

F. Rain Thursday evening, 5/2/85, and throughout Friday, 5/3/85, caused flooding in the D farm pumping area, precluding removal of liquids from tanks D-8, D-10, and D-11 as planned. Contaminated water was removed from tanks C-10, C-11 and A-7. A broken dip leg halted pumping on tank C-10.

G. An estimated 30,000 gallons of yard water from rains was pumped through the inground separator to the Hudson River. An estimated 6,000 gallons of water from A-4 was pumped through the McTighe separator and discharged with the yard water to the Hudson River.

H. Sampled underground drainage line discharge (black liquid) into oil/water separator for priority pollutants. Also sampled combined A-4 yard drainage discharge for NJPDES parameter.

I. Erected scaffolding on tanks D-8, D-10, and D-11 in order to take phase depth measurements.

J. Tank contents measuring continued utilizing both sludge gun and sonar devices. As a result of measurements obtained, "hot tap" valves were installed on tanks A-4, D-8, D-10, and D-11.

K. Water phase samples from tanks A-1, A-7, C-10, C-11, D-10, and D-11 have been sent to DuPont for treatability analysis.

L. The U.S. Coast Guard inspected the site and removal activities as well as the adjoining Spencer-Kellog facility.

M. Air monitoring of the site continues. Significant levels of organic vapors have been measured from tanker hatches and vents when loading water or oil. Significant organic vapor levels (5-15 ppm) have also been measured from underground drainage lines being cleaned and during ground excavations.

N. Piping in the D farm is being removed for operational safety purposes.

O. ERCS is conducting preliminary bench tests to evaluate the proposesed on site water treatment system. Preliminary results indicate a treatability cost of $ 0.32/gallon for selected tank water composites. Also an apparently difficult sludge to treat would result in relatively large volumes.

P. Drip pans have been placed under leaking valves and contents are vacuumed out daily.

Q. Difficulties in oil centrifuge (BS & W) and flashpoint testing have occurred. These are being corrected. Oil from tanks with closed roofs are to be tested for flashpoint first. This includes tanks A-1, A-2, A-6, B-10, B-11, B-12, all "C" tanks, D-2, D-4, and D-5.

R. The Edgewater Fire Department continues to visit the site periodically.

S. Representatives from the U.S. EPA Inspector General's Office inspected the site and reviewed site operational and administrative procedures. A representative from the NJ Attorney General's office also inspected the site.

3. <u>Financial Status:</u>

A. Total Extramural Trust Funds Authorized for Mitigation Contracts	$ 4,460,000
B. Expenditures for Mitigation	
1. Amount obligated under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 453	200,000
a. Estimated expenditures through Friday 5/3/85 under DCN # KCS 453	200,000
b. Balance of obligated amount through Friday 5/3/85 under DCN # KCS 453	-0-
2. Amount obligated under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 460	240,000
a. Estimated expenditures through Friday 5/3/85 under DCN # KCS 460	140,000
b. Balance of obligated amount through Friday 5/3/85 under DCN # KCS 460	100,000

C. Estimated TAT costs through Friday 5/3/85 | 23,600

C.	Estimated TAT costs through Friday 5/3/85	23,600
D.	Estimated EPA costs through Friday 5/3/85	5,000
E.	Estimated total expenditures percentage of 4.46 M	368,600 8.3%

4. FUTURE PLANS AND RECOMMENDATIONS:

A. Conduct ERCS actions on site.

B. Plan removal of liquids from priority tanks including A-1, A-2, A-3, A-4, A-6, A-7, B-5, C-10, C-11, D-8, D-10, D-11, D-12, D-14, D-15, D-29, D-30.

C. Prepare proposal for sludge removal and disposal from bulging drums and high wall cut off tank.

D. Contact ERT for assistance in providing video documentation of site conditions and removal action activities.

E. Clean oil/water separator influent lines.

F. Continue weather monitoring to ensure safe site operations.

G. Since PRP's have been given a time extension to respond, the ERCS delivery order will be increased by $ 88,000 (contingency allowance) for a new total of $ 528,000.

H. An additional $ 270,000 in the total project ceiling will be requested due to arithmetic errors made in the planned removal budget. The new planned removal subtotal will be $ 3,425,000. The total corrected project ceiling budget with contingency is:

Planned Removal	$ 3,425,000
Immediate Removal	470,000
Subtotal	3,895,000
20% Contingency	779,000
TOTAL	$ 4,674,000

I. Continued site assessments have indicated conditions to be worse than originally projected. Aggregate tank leakage has increased, heightening the immediacy of removal actions and increasing the volume of liquid necessitating immediate removal. Also, the cost for oil removal/disposal has been $ 0.45/gallon vs. $ 0.20/gallon anticipated credit as per previous oil, solids and water analysis. Therefore, it will be requested that the immediate removal budget ceiling be increased by $ 517,500 ($ 450,000. + 15% contingency) to $ 987,500. The scope will include those items mentioned above.

J. The new proposed project ceiling budget (including the correction in the planned removal phase noted in "I") is as follows:

Original Immediate Removal (includes TAT & EPA)	$ 470,000
Proposed Immediate Removal (450,000 + 15% contingency)	517,500
Subtotal	987,500
Corrected Planned Removal	3,425,000
Subtotal	4,412,500
20% Contingency (from original proposal as corrected in 'H')	779,000
TOTAL PROJECT CEILING	$ 5,191,500

K. EPA and NJDEP will continue to work with the potential responsible parties as appropriate.

CASE PENDS__X__ CASE CLOSED____ SUBMITTED BY: John Witkowski

John Witkowski, OSC
Response and Prevention
Branch

Date Released: 5-6-85

V503-23

3308

— P R I O R I T Y —

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: May 16, 1985

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J .Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COPTNY
ERD, Washington, D.C. (Data Gram)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP
NRC

POLREP NO.: Forty-three (43)
SITE/SPILL NO.: 43/180-82
POLLUTANT: Waste Oil, PCB's, Heavy Metals, Cyanide, Unknowns
SOURCE: Quanta Resources Corporation
LOCATION: Edgewater, New Jersey
AMOUNT: 4,000,000 Gallons
WATER BODY: Hudson River

1. SITUATION:

A. ERCS actions continue on site.

B. Weather has been unseasonably warm and dry.

C. Physical conditions on site continue to worsen: deteriorating tanks, valves and pipes continue to leak, varying from day to day.

2. ACTION TAKEN:

A. Tank priorities for contents removal have been established. Additional tanks may be added as conditions change and inspections continue.

B. The region requests several corrections to mathematical errors inadvertently made in computing the planned removal budget and project ceiling in the January 25, 1985 Action Memorandum. These are: the planned removal which was given as $ 3,155,000 should have been $ 3,425,000; the total project contingency which was given as $ 735,000 should have been $ 779,000; and finally, the total project ceiling which was shown as $ 4,460,000 should have been $ 4,674,000.

It is also requested that the immediate removal budget be increased by $ 517,500 ($ 450,000 plus 15% contingency) to $ 1,081,500.

The new proposed project ceiling budget (including the correction in the planned removal phase noted above) is as follows:

Original Immediate Removal (including TAT, EPA, and 20% contingency)	$ 564,000
Proposed Immediate Removal Increase (Mitigation contractor costs)	517,500
New Immediate Removal Project Ceiling	$ 1,081,500
Corrected Planned Removal Project Ceiling (including TAT, EPA, and 20% contingency)	4,110,000
NEW PROJECT CEILING	$ 5,191,500

An Action Memorandum has been prepared.

C. Aqueous phase removal (gallons) from the site is as follows:

Tank	Total 5/11 - 5/15	Destination	Total Thru 5/15
yard water	-------	Hudson River	460,000
A-1	-------	Waste Conversion	5,290
A-4	56,700	Hudson River	310,800
A-4	-------	Waste Conversion	4,710
A-7	-------	" "	104,686
B-5	-------	" "	28,068
C-10	-------	" "	17,940
C-11	-------	" "	21,536
D-8	10,610	" "	24,704
D-10	-------	" "	233,003
D-11	-------	" "	20,261
D-13	-------	" "	25,000
D-14	-------	" "	94,785
TOTAL	67,310		1,338,073

D. Oil removal (gallons) from the site is as follows:

Tank	Total 5/11 - 5/15	Destination	Total Thru 5/15
A-1	-0-	Lionetti	4,460
A-2	-0-	" "	10,480
A-6	-0-	Waste Conversion	1,125
D-13	-0-	" "	14,641
D-14	-0-	" "	993
TOTAL			31,699

E. Priority Pollutant analysis of aqueous and soil phase samples collected on 4/15/85 have been received from Stablex-Reuter. These subsurface samples were collected during installation of utility poles. Results are as follows:

PARAMETER	AQUEOUS (PPM)	SOIL (PPM)
Phenol	21	< 500
2-4 Dimethylphenol	19	< 500
Naphthalene	21	12,000
Fluorene	0.19	1,900
Phenanthrene	0.37	6,500
Anthracene	< 0.005	1,200
Benzo(a)anthracene	< 0.005	1,000
Benzene	7.2	200
Toluene	1.1	170
Ethyl Benzene	2.3	200
Arsenic	0.068	730
Cyanide	< 0.5	4.6

The majority of the parameters are derivatives or associated with coal tars and are in the phenol family. As such, they present high local and systemic hazards through contact or inhalation. No PCB's were identified.

F. The landowner installed new boom and sorbent sweep in the Hudson River.

G. Water mains and valves to four (4) hydrants in rear of site mapped. One hydrant in need of repair. Fresh firefighting foam was delivered and tested on site.

H. New flow pathways were cut in the separator, holes plugged and internal surfaces sandblasted. A steam line found in a separator wall was found contaminated with oily phase material.

I. Fresh leakage from a pipeline adjacent to the Spencer-Kellog facility was discovered. Field chlorine analysis of the oily phase material indicated PCB concentrations to be less than 50 ppm. Approximately 300 gallons was removed from the pipeline and transferred to tank A-2. Only 10 gallons of product was lost from the leakage and pumping operation.

J. Tank B-9 (7,000 gallon capacity) was inspected and found to have no hatch cover and liquid level was less than one foot from the top. The tank will be pumped out as soon as possible.

K. Air monitoring on the site continued. Significant levels (5 - 50 ppm) of organic vapors were measured with an HNU from tanker hatches and vents when loading aqueous phase from tank D-8.

L. Drip pans have been placed under leaking valves and contents are vacuumed out daily.

M. Fresh leakage noted from tank A-3.

N. Oily phase BS &W and flashpoint testing being conducted on site.

3. <u>Financial Status:</u>

A. Total Extramural Trust Funds Authorized for Mitigation Contracts	$ 4,460,000
B. Expenditures for Mitigation	
1. Amount obligated under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 453	200,000
a. Estimated expenditures through Wednesday 5/15/85 under DCN # KCS 453	200,000
b. Balance of obligated amount through Wednesday 5/15/85 under DCN # KCS 453	-0-
2. Amount obligated under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 460	240,000
a. Estimated expenditures through Wednesday 5/15/85 under DCN # KCS 460	222,813
b. Balance of obligated amount through Wednesday 5/15/85 under DCN # KCS 460	17,187
3. Amount obligated under ERCS contract # 68-01-6893, O.H. Materials under DCN # KCS 469	88,000
a. Estimated expenditures through Wednesday 5/15/85 under DCN # KCS 469	-0-
b. Balance of obligated amount through Wednesday 5/15/85 under DCN # KCS 469	88,000
C. Estimated TAT costs through Wednesday 5/15/85	32,400
D. Estimated EPA costs through Wednesday 5/15/85	6,600
E. Estimated total expenditures percentage of 4.46 M	461,813 10.4%

4. FUTURE PLANS AND RECOMMENDATIONS:

A. Conduct ERCS actions on site.

B. Plan removal for liquids from tanks including A-1, A-2, A-3, A-4, A-6, A-7, B-5, B-9, C-10, C-11, D-8, D-10, D-11, D-12, D-14, D-15, D-29 and D-30.

C. Prepare proposal for sludge removal and disposal from bulging drums and high wall cut off tank. Prepare proposal for removal and disposal of PCB and non-PCB oil from site.

D. Contact ERT for assistance in providing video documentation of site conditions and removal action activities.

E. Continue weather monitoring to ensure safe site operations.

F. EPA and NJDEP will continue to work with the potential responsible parties as appropriate.

CASE PENDS__X__ CASE CLOSED____ SUBMITTED BY: John Witkowski

John Witkowski, OSC
Response and Prevention
Branch

Date Released: 5-17-85

8503-23
3308

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: June 14, 1985

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C. (Data Gram)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP

POLREP NO.: Forty-Eight (48)
SITE/SPILL NO.: 43/180-82
POLLUTANT: Waste Oil, PCB's, Heavy Metals, Cyanide, Unknowns
SOURCE: Quanta Resources Corporation
LOCATION: Edgewater, New Jersey
AMOUNT: 5,000,000 Gallons
WATER BODY: Hudson River

1. SITUATION:

A. ERCS actions continue on site.

B. Weather has been hot and humid with occasional heavy downpours (> 1 inch in 24 hour period).

C. Physical conditions on site continue to worsen: deteriorating tanks, valves and pipes continue to leak, varying from day to day.

D. Landowner continues to be sole PRP active on site.

2. ACTION TAKEN:

A. Waste removal and separator discharge (gallons) from the site is as follows:

Phase	Off-Site 6/10 - 6/12	Total Off Site
Yard water-separator	156,000	1,202,600
Aqueous-from tanks	76,993	1,308,463
Oily-from tanks	-	64,897
Sludge-from tanks	-	22,061
Total	232,993	2,598,021

B. Edgewater Fire and Police Departments responded to fire on Spencer-Kellog property. They and the OSC agreed that the fire had been contained on the Spencer-Kellog property and had not affected the Quanta Site.

C. The OSC and State representatives met with the landowner of the former Spencer-Kellog property. The fire, oil in the Hudson River, and other potential environmental problems were discussed. The landowner agreed that access should be available to both parties through the common gate in the rear of the property for safety reasons. The landowner appeared willing to meet all applicable environmental regulations.

D. A tank truck was observed removing liquids from within the diked area at the All County Environmental Site. The NJDEP was notified and inspected the site. No evidence of spilled material was seen outside the containment area. According to the NJDEP, All County Environmental is permitted to remove accumulated rainwater from within the diked area.

E. Continued sludge removal from tanks C-8, C-10, B-1 and B-2 for use as bulk removal/stabilization tanks.

F. Completed renovation of on site railroad spur for use of railroad tank cars for bulk liquids removal.

G. Fire hydrant damaged by Railroad Construction Company equipment was repaired.

H. Woodward-Clyde submitted outline of proposed PRP site mitigation work plan to EPA. Review indicated schedule should be brought forward. The proposal included sludge handling and disposal. Comments were given to PRP's, included recommendation of covering deteriorated tank tops.

I. A new gasket was installed around tank B-2 hatch cover and hatch resealed.

J. Construction of safety walkways continued on top of tanks D-8, D-10 and D-11.

K. Two minor spills of liquid product occurred while pumping aqueous material from tank A-1 and A-2. The combined spillage of approximately 150 gallons was contained on site and removed by tank truck.

L. Completed construction of second overland separator discharge line to the Hudson River.

3. <u>FINANCIAL STATUS</u>:

A. Total Extramural Trust Funds Authorized for Mitigation Contracts	$ 5,191,500
B. Expenditures for Mitigation	
1. Amount obligated and expended under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 453, KCS 460, and KCS 469	528,000
2. Amount obligated under ERCS contract # 68-01-6893, O.H. Materials under DCN # KCS 476	517,500
a. Estimated expenditures through Wednesday 6/12/85 under DCN # KCS 476	172,378
b. 15% contingency, DCN # KCS 476	25,857
c. Balance of obligated amount through Wednesday 6/12/85 under DCN # KCS 476	319,265
C. Estimated TAT costs through Wednesday 6/12/85	75,175
D. Estimated EPA costs through Wednesday 6/12/85	10,400
E. Estimated total expenditures	811,810
Percentage of $5,191,500	15.6%

4. <u>FUTURE PLANS AND RECOMMENDATIONS:</u>

A. Conduct ERCS actions on site.

B. Plan removal for liquids from tanks including A-1, A-2, A-3, A-4, A-6, A-7, B-5, B-9, C-10, C-11, D-8, D-10, D-11, D-12, D-14, D-15, D-29, D-30.

C. Prepare proposal for sludge removal and disposal from bulging drums and high wall cut off tank and other tanks as needed. Prepare proposal for removal and disposal of PCB and non-PCB oil from site.

D. Design and construct tank covers for priority tanks with deteriorated or absent tank tops.

E. Make arrangements for bulk removal of liquids by railroad tank cars.

F. Continue weather monitoring to ensure site operations.

G. EPA and NJDEP will continue to work with the potential responsible parties as appropriate.

CASE PENDS X (TAT) CASE CLOSED ______ SUBMITTED BY John Witkowski

John Witkowski, OSC
Response and Prevention Branch

Date Released 6/14/85

503-23
3308

U.S. ENVIRONMENTAL PROTECTION AGENCY

PRIORITY

POLLUTION REPORT

DATE: July 29, 1985

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C. (E-Mail)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP

POLREP NO.:	Fifty-Five (55)
SITE/SPILL NO.:	43/180-82
POLLUTANT:	Waste Oil, PCB's, Heavy Metals, Cyanide, Unknowns
SOURCE:	Quanta Resources Corporation
LOCATION:	Edgewater, New Jersey
AMOUNT:	5,000,000 Gallons
WATER BODY:	Hudson River

1. SITUATION:

A. The ERCS Contractor continues to perform removal actions on this site.

B. Weather has been hot and humid with occasional heavy showers.

C. Physical conditions on site continue to worsen: deteriorating tanks, valves and pipes continue to leak, varying from day to day.

D. Landowner continues to be sole PRP active on site.

2. ACTION TAKEN:

A. The Action Memorandum requesting a $500,000 ceiling increase for the ongoing Immediate Removal Action has been approved by EPA Headquarters. The new immediate removal ceiling is $1,581,500, $360,000 of which will be immediately obligated to the project. The new total project ceiling is $5,691,500.

B. ERCS activity has been on a reduced scale due to limited funds available.

C. Preparations to cover tanks D-12, D-14, and D-15 continue. Wood joints and rafters to support the covering of D-14 have been pre-cut and assembled on the ground in preparation for installation. Construction of D-12 top was begun.

D. Analysis results conducted by S-R Analytical from samples taken from tanks A-7, A-6, A-1, D-8 (oily aqueous) and D-10, D-11 (oily sludge) have been received. Ranges of significant results (ppm) are as follows:

Parameter	Aqueous	Sludge
Methylene Chloride	5.6-35	
1,1,1-Trichloroethane	0.24-4.6	
Trichloroethene	0.18-1.7	330-1,300
Benzene	<0.05-2.8	<10-1,000
Toluene		1,000-3,800
Ethylbenzene		320-1,300
Phenol	1.5-29	
Naphthalene		640-73,000
1,2-Dichlorobenzene		<10-3,000
Acenaphthene		<10-5,500
Fluorene		<10-6,000
Phenanthrene		370-20,000
Anthracene		<10-3,700
Fluoranthene		<10-9,500
Pyrene		230-7,100
Benzo(a)anthracene		<10-2,100
Chrysene		<10-840
Benzo(b)fluoranthene		<10-1,000
Lead	0.76-33	850-1,100
Zinc	<10-80	3,700-4,300
Phenolics		140-430
Oil and Grease	76-120,000	180-240,000
TOC	410-8,900	31,000-35,000
Cyanide	<1-4	12-81

E. Approximately 90,000 gallons of yard water and 68,640 gallons of A-3 aqueous were pumped through the separator/filter to the Hudson River from 7/22/85 through 7/26/85. The volume of aqueous from tank D-10 that was shipped to Waste Conversion (Hatfield, PA) for disposal is 4,799 gallons. A total of 1,846,320 gallons of yard water and 111,520 gallons of A-3 aqueous have been pumped to the Hudson River to date. A total of 1,542,067 gallons of aqueous waste has been shipped off site for disposal.

F. Crane scheduled for 7/26 for tank top placement cancelled due to thunderstorms.

G. State and EPA officials contacted to confirm applicability and availability of financial arrangements for planned removal.

H. EPA met with Allied Chemical representatives.

I. Additional leakage from tank D-12 occurred due to rainwater accumulation. Repairs were subsequently made to tank to eliminate leakage.

J. Tank decommissioning continues at Spencer-Kellog. No fires reached the Quanta property from tank cutting.

K. Repaired minor leaks and continued to collect leaking material for disposal.

3. FINANCIAL STATUS:

A. Total Extramural Trust Funds Authorized for Mitigation Contracts	$ 5,691,500
B. Expenditures for Mitigation	
1. Amount obligated and expended under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 453, KCS 460, KCS 469, and KCS 476	1,045,500
2. Amount obligated under ERCS contract # 68-01-6893, O.H. Materials under DCN # KCS 498	360,000
a. Estimated expenditures through Friday, 7/26/85 under DCN # KCS 498	7,580
b. 15% contingency, DCN # KCS 498	1,137
c. Balance of obligated amount through Friday, 7/26/85 under DCN # KCS 498	351,283

C. Estimated TAT costs through Friday, 7/26/85 — 112,185

D. Estimated EPA costs through Friday, 7/26/85 — 17,000

E. Estimated total expenditures — $ 1,183,402
Percentage of $5,691,500 — 20.8%

4. FUTURE PLANS AND RECOMMENDATIONS:

A. Conduct ERCS actions on site.

B. Priority activities for the remainder of the immediate removal action will be as follows:

- Cover 8 tank tops
- Remove up to 570,000 additional gallons of aqueous and 10,000 additional gallons of sludge from site
- Transfer potential recyclable oil on site to more secure location in tank C-8

C. Initiate planned removal of liquids and sludges from tanks including A-1, A-2, A-3, A-4, A-6, A-7, B-5, B-9, C-10, C-11, D-8, D-10, D-11, D-12, D-14, D-15, D-29, D-30 and all other tanks. Also treatment and removal for recycling of sludges.

D. Prepare proposal for sludge removal and disposal of bulging drums and high wall cut-off tank and other tanks as needed. Prepare proposal for removal and disposal of PCB and non-PCB oil from site.

E. Discharge A-3 and A-4 aqueous through separator and filter system to Hudson River.

F. Prepare sludge and oil sampling plan to initiate planned removal actions.

G. Continue weather monitoring to ensure safe site operations.

H. EPA and NJDEP will continue to work with the potential responsible parties as appropriate.

CASE PENDS X CASE CLOSED____ SUBMITTED BY John E. La Padula

(TAT)

for John Witkowski, OSC
Response and Prevention
Branch

DATE RELEASED 7/30/85

8503-23
3308

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: September 27, 1985

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

TO: C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C. (E-Mail)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP

POLREP NO.:	Sixty Three (63)
SITE/SPILL NO.:	43/180-82
POLLUTANT:	Waste Oil, PCB's, Heavy Metals, Cyanide, Coal Tar Derivatives, Unknowns
SOURCE:	Quanta Resources Corporation
LOCATION:	Edgewater, New Jersey
AMOUNT:	5,000,000 Gallons
WATER BODY:	Hudson River

1. SITUATION:

A. ERCS onsite activities reduced pending PRP takeover of site.

B. Minor leaks continue, however, priority Immediate Removal actions basically complete. Awaiting PRP actions before initiating Planned Removal phase.

C. Allied Chemical and landowner agree to provide site security and routine maintenance at this time, with ERCS contractor providing support equipment, supplies, and/or manpower on an as needed basis.

D. Awaiting PRP aactions before continuing site winterization program.

E. Approximately 2,950,000 gallons of material remain onsite - 1,212,000 gallons aqueous; 450,000 gallons oily (approximately 50% of which has PCBs greater than 50 ppm); and 1,288,000 gallons sludge.

2. ACTION TAKEN

A. Allied Chemical representative on site observing removal actions and working on Site Operations Plan with OSC.

B. Waste removal and separator discharge (gallons) from the site are as follows:

Phase	Off-Site 9/24-9/26/85	Total Off-Site
Yard water - separator	30,000	2,344,170
A-3 aqueous - separator	3,000	284,320
A-4 aqueous - separator	12,000	451,298
Aqueous from tanks	31,700	1,790,827
Oily - from tanks	0	76,425
Sludge - from tanks	0	29,078
TOTAL	76,700	~~5,056,118~~ 5051,118

B. Secured yard and tank top covers in anticipation of Hurricane Gloria reaching area 9/27/85.

C. Implemented securing of secondary containment system.

D. Transferred approximately 6,000 gallons of aqueous from A-1 to A-2 in order to transfer 3,528 gallons of oil from tank A-1 to a more secure location in tank C-8.

3. FINANCIAL STATUS:

A. Total Extramural Trust Funds Authorized for Mitigation Contracts — $ 5,691,500

B. Expenditures for Mitigation

1. Amount obligated and expended under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 453, KCS 460, KCS 469, and KCS 476 — 1,045,500

2. Amount obligated under ERCS contract # 68-01-6893, O.H. Materials under DCN # KCS 498 — 360,000

   a. Estimated expenditures through Thursday 9/26/85 under DCN # KCS 498 — 310,500

   b. 15% contingency, DCN # KCS 498 — 46,575

   c. Balance of obligated amount through Thursday 9/26/85 under DCN # KCS 498 — 2,925

C. Estimated TAT costs through Thursday 9/26/85 — 157,800

D. Estimated EPA costs through Thursday 9/26/85 — 28,400

E. Estimated total expenditures — $1,588,775
Percentage of $5,691,500 — 27.9%

4. <u>FUTURE PLANS AND RECOMMENDATIONS:</u>

A. Conduct removal actions on site to maintain site recurity and containment of waste materials on site.

B. Issue Consent and/or Unilateral Orders to Potential Responsible Parties.

C. Continue to work with Allied Chemical representatives for removal of all materials from site.

D. Prepare to initiate Phase II (Planned Removal Actions) as appropriate.

E. Priority activities for the remainder of the Immediate Removal Action will be as follows:

- Transfer potential recyclable oil on site to more secure location in Tank Farm C. Priority tanks are A-1, A-2, A-7.

- Maintain secondary containment system to contain material on site.

- Complete site winterization program.

F. Initiate planned removal of liquids and sludges from tanks including A-1, A-2, A-3, A-4, A-6, A-7, B-5, B-9, C-10, C-11, D-8, D-10, D-11, D-12, D-14, D-15, D-29, D-30 and all other tanks. Also treatment and removal for recycling of sludges.

G. Prepare proposal for sludge removal and disposal of bulging drums and high wall cut-off tank and other tanks as needed. Prepare proposal for removal and disposal of PCB and non-PCB oil from site.

H. Prepare sludge and oil sampling plan to initiate planned removal actions.

I. Continue weather monitoring to ensure safe site operations.

J. EPA and NJDEP will continue to work with the potential responsible parties as appropriate.

CASE PENDS X CASE CLOSED____ SUBMITTED BY John Witkowski

(TAT)

John Witkowski, OSC
Response and Prevention Branch

DATE RELEASED 9/27/85

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: October 11, 1985

TO: Data Base Manager
C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C. (E-Mail)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

POLREP NO.: Sixty Five (65)
SITE/SPILL NO.: 43/180-82
POLLUTANT: Waste Oil, PCB's, Heavy Metals, Cyanide, Coal Tar Derivatives, Unknowns
SOURCE: Quanta Resources Corporation
LOCATION: Edgewater, New Jersey
AMOUNT: 5,000,000 Gallons
WATER BODY: Hudson River

1. SITUATION:

A. ERCS on site activities reduced pending PRP takeover of site.

B. Minor leaks continue, however, priority Immediate Removal actions basically complete. Awaiting PRP take over before initiating Planned Removal phase.

C. Allied Chemical and landowner agree to provide site security and routine maintenance at this time, with ERCS contractor providing support equipment, supplies, and/or manpower on an as needed basis. Allied taking over winterization, aqueous removal and on site oil transfer program.

D. Consent Order signed by Allied Chemical and effective on establishment of Trust Fund. PRP Trust Fund has been initiated to finance takeover of site clean up by Allied Chemical.

2. ACTION TAKEN

A. Allied Chemical representative on site and working on Site Operations Plan with OSC.

B. Waste removal and separator discharge (gallons) from the site are as follows:

Phase	Off-Site 10/4/-10/10/85	Total Off-Site
Yard water - separator	0	3,344,170
A-3 aqueous - separator	0	284,320
A-4 aqueous - separator	0	461,298
Aqueous from tanks	17,643	1,808,470
Oily - from tanks	0	76,425
Sludge - from tanks	0	29,078
TOTAL	17,643	6,083,761

C. TAT conducted tank phase measurements to confirm waste volumes remaining on site.

D. Approximately 66,000 gallons of aqueous tranferred from tank A-1 to tanks B-1 and B-2. Approximately 92,000 gallons of aqueous transferred from tank D-11 to tanks C-5, C-10 and C-11. Transfers in preparation for removal offsite by rail and/or tank trucks.

E. Three tank trucks of aqueous (17,643 gallons) removed from tank D-11 (C-5) to DuPont Deepwater facility.

F. Valve on tank C-5 leaking. Valve to be repaired after removal of aqueous from tank.

3. FINANCIAL STATUS:

A. Total Extramural Trust Funds Authorized for Mitigation Contracts $ 5,691,500

B. Expenditures for Mitigation

1. Amount obligated and expended under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 453, KCS 460, KCS 469, and KCS 476 1,045,500

2.	Amount obligated under ERCS contract # 68-01-6893, O.H. Materials under DCN # KCS 498	360,000
a.	Estimated expenditures through Thursday 10/10/85 under DCN # KCS 498	310,500
b.	15% contingency, DCN # KCS 498	46,575
c.	Balance of obligated amount through Thursday 10/10/85 under DCN # KCS 498	2,925
C.	Estimated TAT costs through Thursday 10/10/85	163,700
D.	Estimated EPA costs through Thursday 10/10/85	30,200
E.	Estimated total expenditures Percentage of $5,691,500	$1,596,475 28.1%

4. FUTURE PLANS AND RECOMMENDATIONS:

A. Conduct removal actions on site to maintain site recurity and containment of waste materials on site.

B. Continue to work with Allied Chemical representatives for removal of all materials from site.

C. Prepare to initiate Phase II (Planned Removal Actions) as appropriate.

D. Priority activities for the remainder of the Immediate Removal Action will be as follows:

- Transfer potential recyclable oil on site to more secure location in Tank Farm C. Priority tanks are A-1, A-2, A-7.

- Maintain secondary containment system to contain material on site.

- Complete site winterization program.

E. Initiate planned removal of liquids and sludges from tanks including A-1, A-2, A-3, A-4, A-6, A-7, B-5, B-9, C-10, C-11, D-8, D-10, D-11, D-12, D-14, D-15, D-29, D-30 and all other tanks. Also treatment and removal for recycling of sludges.

F. Prepare proposal for sludge removal and disposal of bulging drums and high wall cut-off tank and other tanks as needed. Prepare proposal for removal and disposal of PCB and non-PCB oil from site.

G. Prepare sludge and oil sampling plan to initiate planned removal actions.

H. Continue weather monitoring to ensure safe site operations.

I. EPA and NJDEP will continue to work with the potential responsible parties as appropriate.

J. Demobilize ERCS funds and transfer to TAT, EPA accounts to balance accounts within Total Project Ceiling.

CASE PENDS X CASE CLOSED____ SUBMITTED BY John Witkowski

(TAT)

John Witkowski, OSC
Response and Prevention
Branch

DATE RELEASED October 14, 1985

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: October 28, 1985

TO: Data Base Manager
C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C. (E-Mail)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

POLREP NO.:	Sixty Six (66)
SITE/SPILL NO.:	43/180-82
POLLUTANT:	Waste Oil, PCB's, Heavy Metals, Cyanide, Coal Tar Derivatives, Unknowns
SOURCE:	Quanta Resources Corporation
LOCATION:	Edgewater, New Jersey
AMOUNT:	5,000,000 Gallons
WATER BODY:	Hudson River

1. SITUATION:

A. Allied Chemical on site and has taken over winterization actions and aqueous removal.

B. Landowner continues to provide security, utilities access and aid on site actions.

C. November 12 is current date set for PRP takeover of site with EPA oversight.

D. Consent Order signed by Allied Chemical and effective on establishment of Trust Fund. PRP Trust Fund has been initiated to finance takeover of site clean up by Allied Chemical.

2. ACTION TAKEN

A. Allied Chemical representative on site and working on site mitigation workplan with EPA.

B. Waste removal and separator discharge (gallons) from the site are as follows:

Phase	Off-Site 10/11/-10/25/85	Total Off-Site
Yard water - separator	12,000	3,356,170
A-3 aqueous - separator	0	284,320
A-4 aqueous - separator	0	461,298
Aqueous from tanks	175,343	1,983,813
Oily - from tanks	0	76,425
Sludge - from tanks	0	29,078
TOTAL	187,343	6,271,104

C. Present agreement between State and EPA is for clean up activity to continue under CERCLA. Intent of RCRA will be met, but site will not be required to have TSD facility permit. Allied has applied for generator's permit.

D. Additional leaks from tanks A-4, A-6, D-8, D-9 and D-11 due to weather changes.

E. Increased contamination of aqueous phase in tanks D-10 and D-11 noted during pumping operations attributed to tank contents mixing resulting from climatic and meteorological changes.

F. Consent order fund has been established.

G. Unilateral order against nonconsenting PRPs issued on October 18, 1985.

H. Allied office trailer with telephone and electric set up. Vacuum unit for oil transfer operations delivered.

I. Payloader and bobcat from Allied Baltimore facility delivered on site. Equipment was found to be contaminated with sodium chromate residue. The equipment was isolated in curbed concrete loading area and covered to prevent possible site contamination by rain.

J. Three railroad cars and 18 tank truck loads of aqueous waste were removed to DuPont for treatment and disposal.

K. Two railroad tank cars from Allied delivered to site left on siding outside gate. Cars partially filled with coal tar solids with minimal amounts of liquids.

L. U.S Coast Guard on site to inspect Quanta and Spencer-Kellog waterfronts.

3. FINANCIAL STATUS:

A. Total Extramural Trust Funds Authorized for Mitigation Contracts	$ 5,691,500
B. Expenditures for Mitigation	
1. Amount obligated and expended under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 453, KCS 460, KCS 469, and KCS 476	1,045,500
2. Amount obligated under ERCS contract # 68-01-6893, O.H. Materials under DCN # KCS 498	360,000
a. Estimated expenditures through Friday 10/25/85 under DCN # KCS 498	325,593
b. Balance of obligated amount through Friday 10/25/85 under DCN # KCS 498	34,407
C. Estimated TAT costs through Friday 10/25/85	171,500
D. Estimated EPA costs through Friday 10/25/85	31,200
E. Estimated total expenditures	$1,573,793
Percentage of $5,691,500	27.7%

4. FUTURE PLANS AND RECOMMENDATIONS:

A. Conduct removal actions on site to maintain site security and containment of waste materials on site.

B. Continue to work with Allied Chemical representatives for removal of all materials from site.

C. Priority activities for the remainder of the Immediate Removal Action will be as follows:

- Transfer potential recyclable oil on site to more secure location in Tank Farm C. Priority tanks are A-1, A-2, A-7.
- Maintain secondary containment system to contain material on site.
- Complete site winterization program.

D. Prepare to initiate Phase II (Planned Removal Actions) as appropriate.

E. Sample all materials for categorization as a resource, product or waste as is or as to be processed before removal as energy source product.

F. Initiate planned removal of liquids and sludges from tanks including A-1, A-2, A-3, A-4, A-6, A-7, B-5, B-9, C-10, C-11, D-8, D-10, D-11, D-12, D-14, D-15, D-29, D-30 and all other tanks. Also treatment and removal for recycling of sludges.

G. Prepare proposal for sludge removal and disposal of bulging drums and high wall cut-off tank and other tanks as needed. Prepare proposal for removal and disposal of PCB and non-PCB oil from site.

H. Prepare sludge and oil sampling plan to initiate planned removal actions.

I. Continue weather monitoring to ensure safe site operations.

J. EPA and NJDEP will continue to work with the potential responsible parties as appropriate.

K. Demobilize ERCS funds and transfer to TAT, EPA accounts to balance accounts within Total Project Ceiling.

CASE PENDS X CASE CLOSED____ SUBMITTED BY John Witkowski

(TAT)

John Witkowski, OSC
Response and Prevention
Branch

DATE RELEASED 10/30/85

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: November 13, 1985

TO: Data Base Manager
C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C. (E-Mail)
J. Berkowitz, NJDEP
J. Rogalski, NJDEP

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

POLREP NO.:	Sixty-Eight (68)
SITE/SPILL NO.:	43/180-82
POLLUTANT:	Waste Oil, PCB's, Heavy Metals, Cyanide, Coal Tar Derivatives, Unknowns
SOURCE:	Quanta Resources Corporation
LOCATION:	Edgewater, New Jersey
AMOUNT:	5,000,000 Gallons
WATER BODY:	Hudson River

1. SITUATION:

A. Allied Chemical on site November 12, 1985 under Consent Order to take over removal of all above ground materials. Landowner continues to provide security, utilities access and aid on site actions under Consent Order.

B. Landowner was sole non-consenting PRP to respond on site to Unilateral Order on November 12, 1985.

C. Allied Chemical has received permanent RCRA generators number.

2. ACTION TAKEN

A. Allied Chemical representative on site and working on site mitigation workplan with EPA and NJDEP.

B. Waste removal and separator discharge (gallons) from the site are as follows:

Phase	Off-Site 11/2-11/12/85	Total Off-Site
Yard water - separator	130,500	3,486,670
A-3 aqueous - separator	15,840	300,160
A-4 aqueous - separator	0	461,298
Aqueous from tanks	77,139	2,121,966
Oily - from tanks	0	76,425
Sludge - from tanks	0	29,078
TOTAL	223,479	6,475,597

C. Leakage continues from tanks A-4, A-6, D-8, D-9 and D-11 due to weather changes.

D. Three railcars and two tank trucks of aqueous waste removed from site for treatment and disposal at DuPont.

E. Verbal report of sample analysis conducted on tank A-3 aqueous by ETC Laboratory is as follows:

TOC -	37 ppm
Oil and Grease -	1 ppm
Suspended Solids -	17 ppm

F. Allied and landowner continued winterization of site equipment and buildings.

G. Olson and Hassold, Inc. demonstrated vacuum truck on site. Twenty five hundred gallons of aqueous was transferred from tank S-1 to C-5.

H. Holes cut inside of tanks A-3, D-29, and D-30 to facilitate aqueous sampling and removal. Tank A-3 aqueous being pumped to separator/filter with yard water and discharged to river.

I. Oil sample taken from tank A-7 for analysis by ETC Laboratory.

J. Three members of EPA Regional Office Staff concerned with Office of Inspector General site audits visited site for program orientation by OSC.

K. On November 12, 1985, EPA and TAT inspected condition of tanks and secondary containment berms and dikes; conducted air monitoring for toluene, cyanide and phenol and conducted analysis of separator influent and effluent. All air monitoring results were non-detectable. Water analysis was as follows:

	Influent	Effluent
Conductivity (umhos)	350	315
pH units	6	6
Gravity (API)	9.88	9.88
Temperature C°	9	9

L. On November 12, 1985, landowner conducted site action including operation of oil/water separator and sand/imbiber bead filter, obtained separator influent and effluent samples for analysis, began marking potential usable wells for future groundwater sampling program and tested fire hydrants on site.

3. FINANCIAL STATUS:

A. Total Extramural Trust Funds

Authorized for Mitigation Contracts	$ 5,691,500

B. Expenditures for Mitigation

1. Amount obligated and expended under ERCS Contract #68-01-6893, O.H. Materials under DCN # KCS 453, KCS 460, KCS 469, and KCS 476	1,045,500
2. Amount obligated under ERCS contract # 68-01-6893, O.H. Materials under DCN # KCS 498	360,000
a. Estimated expenditures through Friday 11/1/85 under DCN # KCS 498	325,593
b. Balance of obligated amount through Friday 11/1/85 under DCN # KCS 498	34,407

C. Estimated TAT costs through Friday 11/1/85 — 180,600

D. Estimated EPA costs through Friday 11/1/85 — 33,700

E. Estimated total expenditures — $1,585,393
Percentage of $5,691,500 — 27.9%

4. FUTURE PLANS AND RECOMMENDATIONS:

A. Continue monitoring on site removal actions.

B. Continue to work with Allied Chemical representatives for removal of all above ground materials from site.

C. Continue negotiations with responding non-consenting PRPs.

CASE PENDS X CASE CLOSED____ SUBMITTED BY John Witkowski

(TAT)

John Witkowski, OSC
Response and Prevention Branch

DATE RELEASED 11-14-85

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

DATE: December 5, 1985

TO: Data Base Manager
C. Daggett, EPA
W. Librizzi, EPA
F. Rubel, EPA
W. Mugdan, EPA
S. Dorrler, ERT
J. Marshall, EPA
J. Frisco, EPA
USCG 3rd Dist. (mer)
USCG COTPNY
ERD, Washington, D.C. (E-Mail)
J. Berkowitz, NJDEP
J. Rogalski. NJDEP

Region II
Response and Prevention Branch
Edison, NJ 08837

(201) 321-6670 - Commercial
(201) 548-8730 - 24-Hour Emergency
340-6670 - FTS

POLREP NO.: Seventy (70)
SITE/SPILL NO.: 43/180-82
POLLUTANT: Waste Oil, PCB's, Heavy Metals, Cyanide, Coal Tar Derivatives, Unknowns
SOURCE: Quanta Resources Corporation
LOCATION: Edgewater, New Jersey
AMOUNT: 5,000,000 Gallons
WATER BODY: Hudson River

1. SITUATION:

A. Allied Chemical on site under Consent Order to take over removal of all above ground materials. Landowner continues to provide security, utilities access and aid on site actions under Consent Order.

B. EPA continues to work with landowner and others to answer and implement unilateral order.

C. As of November 27, 1985, EPA's Immediate Removal Action under ERCS has been completed.

D. Cold weather with below freezing temperatures hampering on site actions.

2. ACTION TAKEN

A. Allied submitted draft site mitigation work plan outline to EPA on November 27. Allied agreed to take over removal actions on site following work plan under OSC direction.

B. Waste removal and separator discharge (gallons) from the site are as follows:

Phase	Off-Site 11/25-12/5/85	Total Off-Site
Yard water - separator	480,000	4,425,420
A-3 aqueous - separator	1,200	323,060
A-4 aqueous - separator	0	461,298
Aqueous from tanks	42,909	2,199,588
Oily - from tanks	0	76,425
Sludge - from tanks	0	29,078
TOTAL	524,109	7,514,869

C. Two rail cars of aqueous waste removed from site for treatment and disposal at DuPont.

D. Approximately 5,500 gallons of aqueous transferred from S-1 to C-10.

E. Adjusted flow regulating system in imbiber bead filter cell.

F. Office of Inspector General representatives visited site and met with OSC and Allied representatives.

G. Analysis of Tank D-30 aqueous received from ETC as follows:

TOC - 85.2 mg/l

Cyanide - 29.4 mg/l

Phenol - 1.09 mg/l

Oil & Grease - 3.0 mg/l

OSC requested landowner/Allied to remove aqueous to appropriate facility. Allied agreed and has made arrangements with DuPont. Other product in tank to be recycled as energy source as part of coal tar recycling.

H. Clay barrier placed by leaky secondary containment wall separating Quanta and Spencer-Kellog properties.

I. TAT/EPA prepared audio/visual presentation of site activities conducted during ERCS removal action.

3. FINANCIAL STATUS:

See POLREP #69 for breakdown of obligations, expenditures and committments.

A.	Total Authorized for Mitigation Contracts	$ 5,691,500
B.	Total ERCS Obligated	1,405,500
C.	Total ERCS Obligated Remaining	34,407
D.	Estimated TAT Costs Through Thursday, 12/5/85	190,500
E.	Estimated EPA Costs Through Thursday, 12/5/85	36,400
F.	Estimated Total Expenditures	$ 1,632,400

4. FUTURE PLANS AND RECOMMENDATIONS:

A. Continue monitoring on site removal actions.

B. Continue to work with Allied Chemical representatives for removal of all above ground materials from site.

C. Continue negotiations with responding non-consenting PRPs.

D. EPA and Allied representatives to meet with NJDEP to discuss site operations and permit requirements and exemptions for on site cleanup operrations.

CASE PENDS X CASE CLOSED____ SUBMITTED BY John Witkowski

(TAT)

John Witkowski, OSC
Response and Prevention Branch

DATE RELEASED 12-6-85